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THE HISTORY OF
THE PRISON PSYCHOSES

BY

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DRESDEN HEIDELBERG

AUTHORIZED TRANSLATION

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WITH AN INTRODUCTION

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INTRODUCTION

This work brings the reader to the present-day view-points with reference to the prison psychoses through the medium of a historical review of their development in the German literature. Such a work should be welcomed by all who are interested in the problems of psychopathology and particularly those who long for more rationalistic methods of dealing with the criminal and with all of the problems of criminology.

The movement towards rationalistic conceptions as opposed to feeling attitudes is an extremely slow one and has hardly yet taken so firm a rooting in this country that an unfriendly blast might not blow it away. Such a volume as the present one, therefore, should serve a distinct purpose in helping to fix attention upon those concepts and methods that make for a better understanding of the criminal and for more intelligent methods of dealing with the many difficult problems that surround him.

How discouraging it is to hear a magistrate read a sermon on morality to some degraded wretch who has been found guilty of some, perhaps minor, offence, and then send him to prison for the extreme limit prescribed by the statute! How pathetic if in the procedure the judge should show anger and resentment! How unintelligent are such exhibitions! It is as if a person had become ill from a long course of wrong living, extending over years, and the doctor should dismiss him with a prescription for a pill and say not a word about the regulation of his life.

The criminal act which finally leads to a prison sentence is but the outcome of a life of distorted view-points, of standards of conduct turned and twisted out of all resemblance to those with which we are familiar, and to expect that the natural product of such conditions can be metamorphosed by a three minute sermon displays a profound ignorance of human beings.

We may jump upon the criminal and, with our knee upon his chest and our hand to his throat, choke the breath of life from his body. In doing this, while we may solve the difficulty so far as he is concerned, we have not touched the problem of the causes which created him and which will continue to create others like him: we have not touched the problem of prevention, nor done a single thing to help matters, to assist at solution. We have done little else than yield to a primitive passion for revenge, for "getting even"; is not that, to put it mildly, unintelligent!

The problem of the human mind, while the most obvious of all problems that confront us, is the most neglected. Medical colleges are only beginning, haltingly, uncertainly, to introduce courses in psychopathology. The movement seems a long, long way from including the law school. Our district attorneys, far from being men with a knowledge of the criminal, are young men who seek the district attorney's office as a good advertising medium to enter practice. Our judges, like the district attorneys, have only the distorted knowledge that comes from the court room.

Let us go to the prison and talk with a prisoner who has been convicted of a serious offense against the person. We find a man of apparently ordinary intelligence who answers our questions freely and in every way acts like any one else. Surely he should be punished as a warning to others! Let us question him a little further, let us submit him to a systematic mental examination. What do we find? We find him struggling desperately, trying over and over again, to acquit himself creditably in answer to our very simple questions. A simple story is told him and he is asked to repeat it—not word for word but merely give the sense of it, tell what it was about. He tries as hard as he can. He asks that the story be repeated, once, twice, and finally acknowledges that he can not do it. He simply does not know how to use his mind, he cannot fix his attention on the thread of the

narration, he does not know how to grasp the essentials and lay aside the unessential. He not only does not know how to use his mind, but he probably never knew he had a mind before the examination, even if he knows it now. He has lived a life of instinct, of passion, of needs, desires, wants, wishes, feelings, not of intellect. And his crime was a crime of passion—a crime of blind fury. He hardly knows now what he really did except perhaps as he has heard it detailed on the witness stand. What are your ideas now of this creature's responsibility? I can hardly call him a man for he lives in a world so simple, so crude, so primitive that we are at a loss to understand it. Shall we take him out of his cell in the morning and hang him? Yes if you will. But don't do it under any delusion. Don't think you are helping solve the problem of the criminal. Don't even think, for one moment, that you are setting a wholesome example. What does he and his ilk know of good citizenship, the relation of the individual to society, morality and such complexities. This man has no imagination, he knows nothing of respect for the law. He feels, he does not think. And his feelings are primitive. He loves and it is the love of the beast, and he hates, ah yes! and his hate is the hate of the beast.

Pending the time when all law schools shall have courses in the psychology of evidence and clinics in psychiatry, as they are already beginning to in Europe, let us welcome this little volume and accord to the translators a due measure of gratitude for their work in the service of a good cause, for the study of the insane criminal is one of the best approaches to an understanding of him as a study of the psychology of mental disease is one of the best methods of approach to the understanding of the normal individual.

Wm. A. White.

TRANSLATORS' PREFACE

Among the multitudinous problems which modern times have brought forth for solution, there is probably none of greater importance to society at large than those which concern the criminal classes. The questions which have been raised in this broad field cannot be answered by the studious efforts directed along any one line of approach. However, to the medical profession there is undoubtedly relegated an important rôle in the solution of certain phases of the general problem. Modern trends in this country are recognizing more and more each day the necessity of the coincident evaluation of mental ability and the criminal act. To the psychiatrist then, the comparatively large group of mental disorders that develop in association with conflicts with the law and imprisonment must become of relatively greater importance in proportion to the advancement of our social system in the plans which it must devise for the amelioration and betterment of existing means for dealing with these classes. No extended exposition is needed to emphasize the importance of this group of mental disorders. Rather are the reasons obvious. Here we are dealing with individuals who potentially may become public charges through criminal channels either primarily because of a frank attack of mental alienation, using the term in the narrower sense, or indirectly, because their constitutional make-up, distinctly and indubitably deviating toward the abnormal, leads them into constant conflicts with the dictates of society. It is from these classes that the criminal departments of hospitals for the insane are recruited. From the administrative custom of segregating these individuals, we may be led to the conclusion that they are inherently different from the insane as a class so that the important question arises: are we dealing here with insane persons such as we usually see in asylums or

do they constitute a separate class aside from the fact of being criminal? This is the crux and constitutes the starting point from which any rational attempt to gain an understanding of those mental disorders included under the term "prison psychosis" must be approached. However, it is evident, that the problem is not one of scientific, psychiatric classification only. Its ramifications, because of the position which the insane criminal occupies in the community, extend into important territories quite outside of the domain of mental medicine.

Those who have had the opportunity to come into close contact with the criminal with mental disorder and as a psychiatrist to observe him, must have noted that the population of the criminal departments of hospitals for the insane naturally separate into two distinct psychiatric classes. On the one hand we find types of mental disorder among criminals which in no wise impress us as differing from those among the non-criminal insane, while on the other we are repeatedly confronted with psychotic complexes which cannot be satisfactorily classed under any of the terms employed in the characterization of recognized organic or functional mental disease entities. Those of the first class appear as accidental occurrences among a quite characteristic criminal group of men and both from the administrative and medical standpoint present no new problems. This group is largely comprised of individuals suffering from various forms of dementia precox, who in their career as insane persons, have either fortuitously come within the purview of the law, or whose criminal acts have been determined definitely by their insane ideas. However, those comprising the second class show by the symptomatology of the mental disorder, the unmistakable evidences of a psychogenetically evoked complex, purely reactive in nature. These psychoses developing in such individuals are to be looked upon merely as the reactive manifestations of a particularly predisposed mental make-up to certain specific unfavorable environmental conditions. If such is admitted to be

the case, are the onset, course, and termination of these reactions demarcated sufficiently definitely from other similar psychotic manifestations to justify their grouping under the special nosologic caption "prison psychosis"? Although considerable material has already been gathered in this field the question remains an open and contested one and authoritative exponents of both sides are not wanting. From the practical side the term certainly is of value in that it emphasizes the etiologic potential of imprisonment as a provocative agent in the causation of outspoken psychotic states which properly demand hospital care.

As has been said, the important relation of crime to the psyche is now receiving greater attention from the penologists in this country. Toward the furtherance of this study we have thought that nothing could be more appropriate than a translation of the excellent historical review of the subject of the prison psychoses by Wilmanns and Nitsche. They have thoroughly covered this field from the time of the pioneer publication of Delbrück down to the present. While Wilmanns and Nitsche have considered exclusively the German literature their work does not on this account suffer from lack of completeness. Other studies in this field have not taken into consideration the entire subject but have dealt with detail upon certain phases only.

Inasmuch as a review of the history of the prison psychoses must of necessity cover a prolonged period of changing psychiatric views and trends, it becomes at once apparent that the nomenclature employed by the several authors whose works have been taken into consideration in this review might well be confusing to the psychiatrist of the present day. Especial difficulty has been experienced in expressing satisfactorily in a translation the meanings of the terms Wahnsinn and Verrücktheit. This is especially true because our understanding of the mental disorders comprehended by these terms has passed through many developmental stages during the past several decades, while the many discussions and controversies have succeeded in enhancing

the difficulties. Therefore, in order to make as clear as possible to the reader what meanings have been given these terms in this translation, a few words of explanation regarding their history may not be out of place here. Verrücktheit, in colloquial German, meaning only insanity without differentiation, was first used (1845) by Griesinger in the sense of an incurable, secondary mental affection, was looked upon later as equivalent to the monomania of Esquirol, was still later by Kraepelin considered as synonymous with his paranoia and by some as the equivalent of the délire chronique of Magnan. Griesinger also recognized a partial (corresponding to the délire partiel of the French) and a general allgemeine Verrücktheit (a general confusion of ideas passing into an actual dementia). These last two divisions have been used by Köhler, whose paper is reviewed in this work (p. 12). Subsequently, Shell employed the term Wahnsinn to express what Griesinger had understood by Verrücktheit. At first then, both terms appear synonymous but later each came to convey a particular meaning as set forth by Kirn. Kirn maintained that the difference between the two terms was one of prognostic character, that Wahnsinn was curable while Verrücktheit was incurable and therefore, he objected to the proposal of Werner to adopt the term paranoia to include both of these as indifferent.

The term primäre Verrücktheit (Wille, Meynert), indicating a truly primary mental disorder without deterioration, is, so far as nomenclature is concerned, practically the equivalent of the mania or melancholia of the older writers.

It is evident from the foregoing brief historical sketch that we have nothing in our present psychiatric terminology that will exactly coincide or adequately express in every instance the fineness of differentiation once implied by these German terms. We have therefore used the word paranoia and also, here, as well as in many other somewhat similar difficulties, have left the original term in parenthesis in order to avoid any misunderstanding in so far as this may be possible.

In conclusion, the translators take this opportunity of expressing to Doctors Nitsche and Wilmanns, appreciation of their kindness in authorizing this translation.

F. M. B., Jr.
B. G.

Washington, D. C.,
April 11, 1912.

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THE HISTORY OF THE PRISON PSYCHOSES

FIRST PERIOD

When the penal institution at Halle was founded in 1842, it was immediately filled with inmates from the overcrowded institutions in Spandau and Lichtenberg, and when ten years later considerable changes in the buildings had been made it served again for the relief of the new prison in Berlin. Naturally these institutions availed themselves of this favorable opportunity to rid themselves of their most troublesome element and the result was that the institution at Halle in the middle of the fifties contained within its walls a number of convicts from the old provinces who were not amenable to discipline.

The most troublesome inmates of penal institutions are those suffering either from obvious or unrecognized mental disorders and it is easy to understand that the prison at Halle gradually held a disproportionately large percentage of these. The frequency of mental disturbance among the inmates was at last so great that it attracted the attention of the authorities and the question was raised: whether the cause did not perhaps lie in the system of punishment prevailing at Halle, especially in the frequency of solitary confinement.

The criticisms directed against this penal system caused the physician of that institution, the elder Delbrück, to consider in his annual report for 1853 the reasons for the frequency of mental diseases among those inmates under his supervision and incidentally for the first time in Germany, to describe in a thorough manner the relation between mental disturbance and crime. Thus originated the first German work concerning the prison psychoses.

The institution at Halle was only intended for those guilty of grave crimes who were to serve a penitentiary sentence of at least five years. Most of the inmates, on an average numbering from eight hundred to one thousand, were recidivists, guilty of crimes against property, and from a fifth to a fourth were guilty of crimes against the person. The latter especially revealed a pronounced tendency toward mental disorder and among the fifty-eight insane whom Delbrück observed in the course of a year, there were 23, *i. e.,* more than one third, belonging to this class. Among the insane who were guilty of deeds of violence, those who had made attempts against life (murder and manslaughter) were especially numerous; one fourth of the insane criminals belonged to this group, while they only constituted a sixteenth of the total number of inmates. This remarkable proportional relation between the number of the insane guilty of crimes against property and those guilty of deeds of violence, had a decided effect on the views of Delbrück concerning the relation of mental diseases to crimes against property on the one hand, and to deeds of violence on the other, although the question remained undecided how far this proportion might be regarded as purely accidental.

In regard to the relation between mental disturbances and crimes against the person, Delbrück teaches that the cause of the crime may be found in the mental disturbance either during its developmental period or after it had reached its heighth. But on the contrary, the deed of violence with its immediate consequences might be the reason for the development of the psychosis. According to Delbrück the cause of the breakdown lies partly in the long duration of the imprisonment, which is often for life. The principal reason, however, is to be found in the circumstance, that deeds of violence are preferably committed by those of good reputation (of the twenty-three who had committed deeds of violence, thirteen were of good reputation), by still uncorrupted and honor-loving men, often against their will

and intention, during a fit of passion. This sort of person is much more deeply affected than the habitual criminal by the repentance for the deed and the regret for the loss of honor and freedom. Aside from this the character of the crime itself must be considered, for the thought of having murder on one's conscience as a rule affects the mind, even of the most corrupt criminals, more deeply and lastingly than any other punishable act.

Therefore, according to Delbrück, the mental disturbances of those who have committed deeds of violence, occupy a special position clinically. All the cases in which the crime with its immediate consequences appears clearly as the cause of the later disease, have certain peculiarities in common: the fixed ideas and insane notions begin to develop as a rule in the first years of imprisonment and betray an inner connection with the crime committed. The prisoners have a tendency to entirely deny the crime, or to extenuate it, or to delude themselves with the idea of an immediate return to freedom or the injustice of their imprisonment. The origin of the disease may be recognized from its character, by the deep and lasting emotional upheaval, the incessant occupation of the despairing soul with this one subject, the restless but useless effort to escape the torments of the court and the persecution of an avenging justice, the unsatisfied longing for freedom and former happy conditions. If the disease continues for a long time, as a rule little trace of the mighty shock which the emotions have experienced remains. "The process which produced the insanity is exhausted, the insanity continues but the powers of the emotions are dead."

Delbrück's views concerning the relation between mental disturbances and crime in the case of those guilty of crimes against property, that is to say the habitual criminal, are entirely different. Here likewise, the mental disturbance may be the cause of the crime, although by far not so frequently and not so unequally as is the case with the criminal by passion. But in those guilty of crimes against property, in contrast to those

guilty of crimes of violence, it is a rare exception that the crime in itself is the cause of the mental disturbance. If a recidivist guilty of crimes against property develops a psychosis, the cause lies in the long term sentence, but that in itself, however, has a less harmful effect on the health than the contrast between freedom and imprisonment, the hopelessness and the painful thought of being deprived of freedom forever, or at least, for a long time. The main reason, however, for the later development of mental disturbance in those guilty of crimes against property, is to be sought in the past career of the criminal. The great majority of them began their careers of crime in their earliest youth, many even as boys. They grew up in poverty and without supervision, were affected by evil tendencies and vice from youth or yielded to drunkenness and sexual excesses of various sorts, passed a large part of their lives in prisons, penitentiaries, almshouses and correctional institutions; in short they led in every respect a dissolute and irregular life, which must have at the same time acted deleteriously upon their morality as well as their physical and mental health. That such a career often furnishes the proper soil for the development of a mental disturbance seems to Delbrück a just supposition.

Delbrück defends this view in a work which appeared three years later, wherein he seeks to sustain his theory by two thoroughly described cases of progressive psychoses, of paranoia of the criminal (Verbrecherwahnsinn) as he calls the disease. Both cases have this feature in common, that in the course of time the insane and delusional ideas brought about a situation completely the opposite of the actual circumstances. The criminal considered himself innocent and the representatives of justice the real criminals. According to Delbrück's view they differed from one another in that in one case the only criminal deed in his life appeared as the essential cause of the insanity, determined the nature of the disease, and the content of the delusions; while in the other, an old habitual criminal, the disease showed less the

stamp of a single deed than of the criminal habit which had become a second nature to him.

Delbrück, therefore, believed to have found in his paranoia of the criminal (Verbrecherwahnsinn), a characteristic disease, which was sharply demarcated from the forms of insanity to which those living in freedom are subject. If the onset of the disorder takes place prior to the crime, or if the relation between the crime and the psychosis is only a coincident one, these mental disturbances are not essentially different from those in ordinary life. In these cases even though the crime and the imprisonment may influence the further development of the disease, and gradually lend to it a coloring resembling that of the paranoia of the criminal (Verbrecherwahnsinn), this delusional reversal of conditions, in which the criminal thinks himself wholly blameless and that honorable people only imagine his crimes and vices, does not exist, according to Delbrück. Ideas of the illegality of their sentence, of unlawful treatment, unjust continuation of the imprisonment, and incessant accusations and complaints against justice and prison officials and, in consequence of this, the idea of martyrdom, he also found in these criminals.

The two essays of Delbrück's were at first the only works on this subject until 1862 when Gutsch, a physician in the penitentiary founded at Bruchsal in 1848, published his twelve years' experience concerning mental disturbances in solitary confinement.

Similarly to Delbrück, Gutsch divides the causes of the disease into two classes, those connected with the crime, sentence and punishment, and the various factors which lie beyond the imprisonment. Gutsch assumes as proven that the crime in itself, the conviction and punishment predispose to mental disturbance and confirms Delbrück's view that the conviction and imprisonment have a more intensive effect when the crime arises from uncontrolled emotions and an ill-regulated life, where vice and moral depravity have exercised a destructive influence on mind and body. Furthermore, according to the experience of

the prison physician at Bruchsal, grave offences against the person especially predisdose to mental disease. The more infrequent crimes of murder, manslaughter, high treason, mutiny, insubordination, desertion, plunder and sexual offences, produce mental disturbances much more frequently than the more frequent crime of theft. Likewise the impulsive crimes, the results of strong affects of every sort upon the temper and emotions, predispose more to mental disease than habitual ones, which are the result of the development of a deep seated depravity.

Gutsch also believed himself justified in regarding deficient education as a factor favorable to the development of mental disturbance, and explains this by assuming that the educated endure the imprisonment better because they know how to employ themselves, while the uneducated and mentally weak are more susceptible to the dangers of ennui and depressing emotions. Gutsch was led to this conclusion by the facts statistically established, that among the uneducated inmates of Bruchsal, 3.3 per cent. acquired mental disease, while among the educated only 1.08 per cent. But he forgot in this connection that the educated inmates of the penitentiaries (1848) were mostly political prisoners who were vastly superior to those guilty of crimes against property not only in education, but above all, in mental vigor.

Gutsch ascribes a much greater importance to certain somatic influences associated with the penitentiary life. The weakening and inactivity of the reproductive life, of the animal and vital functions in the prisoners' physical organization, the predominance of apathy and passivity which are the unavoidable attributes of every form of imprisonment and every penal system. It is, therefore, easily comprehensible that the sense of debilitation and loss of power must produce a subjective feeling of increased susceptibility to disease, at least a mental discord, aside from any really abnormal disturbance which may contain the germ of more serious disorders. Gutsch believes that he can

confirm the expectation, that during the intensification of punishment, particularly during imprisonment in darkness with diminution of food, these psychic and somatic factors may attain a greater influence and may lead to an increase in the number of psychoses. During the years from 1853 to 1857, when these disciplinary punishments were prescribed all too frequently by the courts, a distinct increase in the number of mental diseases was noticeable. But because in these years there was a strong influx of prisoners from the general prisons of the country, who were weakened by their long terms of imprisonment, these statistics do not establish the view of Gutsch, though it is in itself a proper one.

In addition to these general causes here mentioned, Gutsch makes special individual causes responsible for the development of mental disturbances, such as epilepsy, heredity, the degree of mental capacity, eccentricity, passion, brutality, irascibility, periodic conditions of excitement and irritability, changeableness of temper, exaltation, pride, self-conceit in the poorly educated, religious phantasy, superstition, belief in dreams, etc.

Delbrück had already given prominence to the fact that a prolonged absolute isolation has a very injurious effect on the body and mind and that it seems to predispose to hallucinations, as does the seclusion of prison generally. He advised the immediate termination of solitary confinement in all cases where its deleterious effects upon the emotions were noted, and the substitution for it of a treatment as far as possible in contrast to it. This was considered to be the surest means of averting the disorder, or checking it in its incipiency. Gutsch who in the course of an experience of twelve years among three thousand prisoners, gathered a great many observations upon the effects of solitary confinement, substantiates Delbrück's views. He accentuates especially the influence of solitary confinement upon the emotional life of man and holds isolation largely responsible for the frequent outbreaks of mental disturbance. Its effect is greater the more

irreproachable the previous life of the convict has been, but even in old criminals it causes a change of personality. These emotional shocks, as Gutsch designates the reactions of the psyche to solitary confinement, can not be likened to that sadness and dejection which always accompanies the change from freedom to imprisonment; this is also found in mass imprisonment. Here one has to deal with an emotional effect evoked by the self-contemplation due to being alone—the deepest expression of an intense tumult in the emotions of the isolated prisoner. The emotional shock must often be hailed as the turning point towards reform in the life of the prisoner, but at the same time it furnishes the transition between mental health and disease, and emphasizes the dangerous side of solitary confinement. Delbrück gave his special attention to only a small number of chronically insane inmates of the prison at Halle. The remainder he does not mention in his work, and there is no doubt but that he overlooked or failed to recognize a large number of cases, especially those of only temporary mental disturbance. Gutsch's work is an advance in this respect, as he considers all cases which came under his observation between the years of 1850 and 1862. He likewise endeavored to render more accurate reports concerning the prognosis of the cases studied by him, and sought for this purpose more thorough knowledge in the homes of the discharged prisoners.

The material which furnished the basis for Gutsch's views consisted of eighty-four cases of mental disorder which developed in solitary confinement between 1846 and 1860. These cases were stamped by their common etiologic factor with a homogeneous seal. The similarity of the recurring attacks of emotional and depressive shocks, of religious and agitated melancholia, of a tendency to suicidal and maniacal outbreaks, of homesickness, and of the frequent idea of having been pardoned, shows unmistakable features of a common origin. The frequent belief in a sustained injustice, in lesser guilt or even innocence, the suspicion, hatred and disgust retained from the time of the trial, trans-

fer themselves to the conditions of prison and develop not infrequently under the favorable influence of solitary confinement into pathologic delusions. They evidence themselves in hallucinations and delusions of persecution, of poisoning, deal with the injustice of continued confinement, and manifest themselves in an insane rebellion against the prison routine. Because of all these symptoms common to the disturbances developing in prison, these cases assume a strong outward similarity. This similarity, however, goes still further, and applies even to the outbreak of the disorder, because according to Gutsch's observations one of the most prominent characteristics of the psychoses developing in solitary confinement is that delusional ideas do not attach themselves immediately to the varied emotional disturbances, but that the psychosis frequently sets in with auditory hallucinations or isolated delusions without any other premonition. According to his description there immediately occur in most cases auditory hallucinations of a mocking, derisive, provoking and sometimes of promising content. More rarely isolated delusions, such as poisoning, persecution, and chicanery on the part of the overseers develop first, and provoke more marked changes of mood and behavior. In all cases, however, there develops the unalterable conviction of the genuineness of the hallucinatory and delusional experiences, apprehensiveness and restlessness, irritability or excitement and insomnia. According to the predominating affect-tone and further development of the disorder, Gutsch divides his eighty-four cases into affective disorders, that is, mania and melancholia, and disorders of the intelligence, as paranoia (Wahnsinn and Verrücktheit) and dementia (Blödsinn). The majority of the eighty-four cases, namely fifty-eight, Gutsch designates as melancholia, and again subdivides these and groups a large number (32) under the name of melancholia of slight degree. In these the undoubted manifestations of psychic disorder which attached themselves to the depressive mood remained isolated, or manifested themselves only periodically or temporarily without

developing into a higher form. All of them made complete recoveries upon removal from solitary confinement or the termination of imprisonment. These melancholias comprise, according to Gutsch, aside from the few cases of acute and transitory confusion accompanied by emotional shock, especially those forms characteristic of solitary confinement, in which the suddenly developing hallucinations of hearing and delusions remain isolated and restricted. They, however, deserve great consideration because of the ease of their development, and because they frequently form the initial stages of graver disorders, though not possessing characteristics of complete psychoses. Because of the high percentage of recoveries among cases of melancholia, Gutsch considers that, as a general rule, the prognosis of the psychosis developing in solitary confinement is extremely favorable. The inquiries concerning the discharged patients showed that a great majority of them remained permanently cured. Gutsch, therefore, thinks the belief that certain cases having a mild beginning may contain the nucleus for the development of a later, graver disorder, entirely unfounded. Thus solitary confinement itself furnishes a strong predisposition for the development of mental disorder. At the same time, however, it affords the ability to recognize these mental disorders in their earliest stages, so that in the majority of cases, lasting after-effects can be prevented by timely interference.

Gutsch's collective descriptions are, in contradistinction to those of Delbrück, deficient in clearness, accuracy and completeness; they take into practical consideration the content of the delusions and hallucinations, but they leave us more or less completely in the dark concerning the emotional state, the orientation for time and place, the state of consciousness, insight, etc. Nevertheless, at that time, the superintendent of Illenau, Roller, was convinced from Gutsch's exposition, of the existence of a characteristic form of melancholia with auditory hallucinations which was due to solitary confinement and which as a rule immediately

subsided upon the transfer of the patient to mass-imprisonment. Even he, however, did not obtain a clear picture of this prison psychosis, and expressed the wish that Gutsch had furnished more detailed information concerning the state of consciousness during and after these attacks, and concerning the coexisting physical and psychic states. This desire remained unfulfilled. Delbrück, on the contrary, again took the opportunity to report his further experience with mental disorders in criminals. He adhered in the main to his former views. The cause of the development of a psychosis in the offender against property lies mainly in his former life. In the criminal by passion, on the other hand, the crime itself and its immediate results are the chief etiologic factors. He especially opposed Gutsch's views that the psychoses described by the latter are characteristic of solitary confinement. He himself met with such mental disorders in solitary confinement but he also observed them just as frequently, if not oftener, in mass-imprisonment. Delbrück doubts above all Gutsch's assertion of the frequency of the acute onset of these cases. He believes that only in rare instances does a previously healthy individual suddenly develop a severe, acute mental disturbance which then remains stationary for months and years, or quite rapidly becomes absolutely incurable. Much more frequently there first develop periodic, mild indications, then the real attacks become evident, and often disappear again after a few days or weeks. The attacks repeat themselves in shorter or longer periods, there are years during which they are of frequent and significant occurrence, then again years when they completely disappear, but sooner or later the attacks come closer together, their duration becomes more and more prolonged, the lucid intervals progressively shorter, and they leave behind more or less significant residuals, until finally the disease assumes larger proportions and becomes permanent and incurable. In certain cases this process may terminate in the first year, in others only after ten or twenty years, or on the other hand, a spontaneous and quite unexpected recovery may later set in. To this group belong half of the insane criminals.

Following the studies of these prison physicians of the prison psychoses, psychiatrists commenced to concern themselves with the solution of this problem. Aside from Reich's important work in 1871, we must consider those of Köhler and Sommer. Köhler studied the thirty-one female convicts of the Hubertusburg Insane Asylum. Without going into this work in detail, we will simply mention that he believed he had found among the cases studied by him such disorders as mania, paranoia (Wahnsinn, including also partielle Verrücktheit and allgemeine Verrücktheit) and dementia (Blödsinn), which did not occur well defined, but always distorted, over-shadowed and blurred by other disturbances existing simultaneously. The indefiniteness of these psychic forms, their transition into other states, the predominance of perverted emotional tendencies, made any well defined diagnosis often impossible. All of these psychic disease states, Köhler says in his summary, are complicated by conditions and symptoms having their roots in the moral obliquity, coarseness and brutality of these individuals, which distort and dim the disease picture in the most contradictory manner. These moral degeneracies which have been a part of the psychoses from their very incipiency play the same rôle as do the constitutional dyscrasias in physical diseases, transforming the original disease beyond recognition, and thus they form a particular species in insane asylums owing to their peculiarities. He concludes that one would not be far amiss in designating them as "*mania vesania criminosa,*" analogously to the designations scrofulous and syphilitic in speaking of physical disorders.

Of much greater significance was the other psychiatric work, "Contributions to the Study of the Criminal Insane," by Sommer, which appeared in 1884. Sommer studied all the cases which were transferred from various prisons and penitentiaries to the insane asylum at Allenberg during a period of thirty years, in all one hundred and eleven cases. The majority of these cases, namely 75 per cent., already had the predisposition to mental dis-

orders because of imbecility, eccentricity of manner, irritability of character, brutal impulsive sensuality, drunkenness, brain concussions, etc. Such a predisposed brain becomes easily diseased under adverse circumstances. The crime itself, the excitement incident to the act, the detection and publicity, the remorse and regret, the worry about relatives, the sad outlook for the future, the hopelessness of the situation, especially in long sentences, all these along with the suddenly changed mode of life, the curtailment of freedom, the forced subjection to an unaccustomed severe discipline, the scarcity of exercise and air, the consequent prison anemia, the sexual aberrations, are certainly sufficient to unbalance a normal mind, how much more easily therefore a mind that is already working abnormally, one that is accustomed to the routine stimulations of customary luxuries which are now denied it. Certainly the punishment itself has a marked influence on the mental condition of the patient. Much greater importance, however, Sommer attributed to the kind of punishment. The inmate of a reformatory who spends most of the day in company with other prisoners, or in the open, and who as a whole leads during his imprisonment a more rational life than that which his poor home surroundings, or his vagabond existence afforded him, will seldom develop a mental disorder as the result of his imprisonment. Therefore Sommer considers the development of mental disorders in reformatories of very rare occurrence, and as a matter of fact, of the thirteen cases of reformatory inmates received at Allenberg in the course of thirty years, eight were definitely insane before their conviction, and the remaining five were at least very suspicious cases. In contrast, however, to the workhouse or reformatory, the penitentiary, with its long term sentences, its solitary confinement, its hard labor and enforced mutism, its monotonous occupation and severe discipline, its entire mode of life favorable for the development of anemia and phthisis, furnishes greater opportunity for the development of mental disorders. Accordingly the pentitentiary furnished thirty-six of the cases at Allenberg,

twenty-eight of which developed mental disorders only after their confinement.

Just as Delbrück and Gutsch had before him, Sommer came to the conclusion that the occasional criminal, and the criminal by passion, developed mental disorders much more frequently, indeed, almost twice as frequently, as the habitual criminal. He attributes this to the fact that the criminal by passion feels the punishment more acutely, his entire mode of life in prison being very much opposed to his demand upon life, and his emotional make-up submits with much greater difficulty to the discipline. The habitual criminal, on the other hand, adapts himself more readily to his lot. Sommer likewise found, in accordance with the former authors, that the majority of the insane criminals had long sentences, only twelve of his thirty-six patients who came from the penitentiaries had less than a five year sentence. Three times as many of the long term prisoners as of the short term ones became insane. Sommer also agrees with Delbrück and Gutsch that the majority of cases develop their mental disturbances within the first two years of imprisonment, therefore the confinement in itself cannot be considered as the cause of the mental disorder, but rather its psychic effect, especially the contrast between liberty and prolonged imprisonment. In his clinical views Sommer again differs from the previous authors. His observations taught him that there is no form of mental disorder among criminals which takes a definite course either constantly or even very frequently. On the other hand, he was of the opinion that there exists a specific psychosis which develops almost exclusively in criminals, and without any demonstrable relations with the nature and degree of the offence. Vagabonds with relatively short sentences are affected with this disorder as well, although not as frequently, as life sentence prisoners. This specific mental disorder is what he calls "prison paranoia" (Gefängnisswahnsinn). What Delbrück describes as the paranoia of criminals (Verbrecherwahnsinn) and Gutsch as the psychosis of solitary confinement, are according to

Sommer, nothing else than episodes of his prison paranoia. Nearly all the diseased states developing in confinement are merely developmental stages of this psychosis. It matters not how extremely varying their manifestations, they are in most instances only to be considered as different phases, as abortive cases of this prison paranoia.

Accordingly, nearly all of Sommer's cases suffered from this psychosis. Aside from this disorder, he observed only a few cases of paresis, alcoholic mania, mania, catatonia, imbecility, epilepsy, secondary dementia, traumatic insanity and paranoia (Verrücktheit). In a detailed description, Sommer endeavors to account in a psychological manner for the origin and development of this progressive disorder by aid of theoretical and crude anatomical conceptions. He, too, does not escape the danger of forcing symptomatology to favor his attempts at explanation. Nevertheless, his descriptions mean a decided step in advance of what had previously been said on the subject. As the first evidence of the beginning disorder, according to Sommer, is the strikingly changed manner and behavior of the individual. He gradually becomes careless in his work and is unable to concentrate his attention upon it. Every now and then he looks behind him in an astonished manner, attentively listening to some inexplicable noise. These elementary disturbances of the sensorium increase as his working capacities diminish. The patient becomes uncertain, depressed, irritable, suspicious. From these new conflicts with his environment constantly arise, in vain he seeks an explanation for this mysterious, inexplicable change in his situation, he sinks into an apathetic brooding, is painfully affected by unpleasant bodily sensations, and perplexedly faces the indefinite illusions and hallucinations. Thus the first stage of the disorder is reached, the state of perplexity. As long as the disease has progressed no further, as long as the hallucinations remain elementary in character, Sommer deems improvement or complete cure possible. This first stage, which, as a rule, is accompanied by a sad and

anxious affect-tone, is what former writers usually described as melancholia. Sommer, however, considers this but a stage in the development of his prison paranoia, which reaches its full development so much the more certainly as the injurious effects of imprisonment continue active. The hallucinations become more numerous; auditory, visual, and olfactory hallucinations set in, and various sexual sensations develop. Disciplinary measures strengthen the prisoner's belief in his false persecutions and denunciations, the mental enfeeblement progresses rapidly, frequent excitements and vicious assaults occur, and are again met with disciplinary measures, until finally the disease is recognized. Simultaneously with this, the deleterious transition from fleeting and changeable delusions into fixed and systematized ones takes place. An unshakable delusional system has been elaborated. His prison paranoia is fully developed. During this stage the fallacious sensory perceptions spread to other sensory fields. They become more and more distinct, and attach themselves to the all dominating persecutory ideas. In this stage only temporary improvement is possible. Complete recovery, however, is out of the question. Gradually there develop grandiose ideas, which according to Sommer evolve in a psychologic manner from the persecutory and prejudicial delusions. Simultaneously with this the patient's conduct becomes quieter, he returns to work, and interrupts his occupation only long enough to show by means of mysterious grimaces and inexplicable gesticulations his outcropping grandiose delusions. The excited outbursts which occur during this stage of the disorder differ from similar manifestations of other insane people in their striking want of consideration for persons and objects. Also, the gradual transition of the disorder into confusion and dementia offers nothing characteristic; this is liable to occur in his prison paranoia sooner and in a more pronounced manner than in ordinary insanity. Such is Sommer's prison paranoia (Gefängnisswahnsinn) from which, according to him, the majority of insane criminals suffer. Though this prison psychosis

is a specific mental disturbance of prisoners, its characteristic coloring, however, need not be considered as proof of the causal relations between confinement and mental aberration; the origin of the disorder is to be looked for in the previous history of the criminal. Confinement in itself influences only the symptomatology. It does not evoke the disorder itself but determines its form.

To Sommer belongs the credit of having shown more accurately than Delbrück, and especially Gutsch, the similarity of the great number of the psychoses developing in prison. His description itself, however, no matter how correctly the individual symptoms may have been delineated, is an inaccurate one because of the forced schematization with which Sommer endows it.

Quite a few years before the appearance of Sommer's work there were published two smaller dissertations on this subject, both by prison physicians. Knecht published in 1891 his experiences in the insane department of the prison at Waldheim, and reported data concerning the one hundred and sixty-eight inmates of that institution. He substantiates the views of his predecessors that the frequency of mental disturbances in prisoners is in direct proportion to the gravity of the crime and the length of the consequent sentence, that the majority of the patients, namely, more than two thirds, went insane within the first two years of their imprisonment, and that more than one half of them were in solitary confinement before the appearance of the mental disorder, so that its unfavorable influence cannot be doubted. Among Knecht's diagnoses the various forms of paranoia (Wahnsinn and Verrücktheit) played a most important rôle. The paranoia manifested itself, as a rule, in the persecutory psychosis of the criminal so classically delineated by Delbrück. Prognosis of the disorder is unfavorable; thus of sixty-nine only six recovered. Besides epilepsy, melancholia with a good prognosis was very frequent, out of thirty-six, twenty recovered. Aside from this Knecht observed twelve cases of circular or periodic psychoses, and believed that

especially among partially recovered cases of circular insanity, cases of moral insanity, hypochondriacal paranoia (Verrücktheit), etc., many would escape notice as the disease picture might easily be hidden under the products of disciplinary errors. Mania and paresis were represented respectively by eleven and twelve cases, thus in a much smaller ratio than they are wont to occur in freedom.

In the same year appeared Kirn's brief contributions concerning prison psychoses. The investigations of Delbrück, Gutsch, and Knecht, concerned themselves chiefly with grave offenders. Kirn conducted his studies among the insane of the Freiburg county jail, which served for the detention of milder offenders—these being kept in solitary confinement. As a general rule, therefore, only short term sentences were served here, by far the majority not over one year, those of two or three years being relatively rare. The number, therefore, of previously unconvicted criminals by passion is not a small one, namely of such persons who in the heat of excitement committed offences against the person, or when sensually excited, crimes of a sexual nature. It was, therefore, to be expected that Kirn's results would differ from those of the former authors. Kirn gives a review of forty cases observed by him at Freiburg between October, 1879, and 1880. In the majority of cases he holds certain individual factors, such as hereditary taint, feeble-mindedness, drunkenness, etc., co-responsible for the occurrence of the mental disorder. Only in six of the forty cases were these entirely wanting. The exciting factor was the imprisonment itself, with its deprivations and wants, its completely changed mode of existence, and especially, its isolation with its grave influence on the emotions. The fact of the greater frequency of mental disorders among criminals by passion than among the habitual criminals was established by Kirn. To the moral offenders and criminals by passion which Kirn collectively considers as due to the overflow of exaggerated sensual tendencies and strong emotional affects, belongs the overwhelming number

of twenty-three of his forty cases. Crimes which only gradually dulled the moral sense—offenses against property, such as theft, fraud, embezzlement and concealment of stolen property—were only represented by seventeen cases, therefore by a much lesser number, which, according to Kirn, would have been still smaller, were it not for the fact that many of these cases were predisposed to mental disorder by various factors previously mentioned. Among his forms of insanity, Kirn observed two which were especially frequent in their occurrence, namely melancholia, seventeen cases; and paranoia (Verrücktheit) thirteen cases. The preponderance of melancholia Kirn attributes to the depressive influences on body and mind which manifest themselves as the results of the former life of crime and imprisonment. Kirn's melancholia, which manifested itself exclusively in the affect domain without allegorizing delusions and hallucinations, occurred only once among the seventeen cases. The *melancholia stupida,* with its complete psychic constraint and outward physical and mental retardation, occurred likewise only once, whereas the distinct hypochondriacal melancholia furnished five, the hallucinatory melancholia six, and lastly the agitated melancholia four cases. Kirn attributes to solitary confinement the preponderance of the above forms over the otherwise very common simple melancholia.

In melancholia with predominating auditory hallucinations, the hyperasthesia of the hearing centers which is brought about by solitude plays an especially important rôle.

Next to melancholia, paranoia (Verrücktheit) comes with thirteen cases. He subdivides these into two distinct groups. The first which does not differ in the least from ordinary primary paranoia (primäre Verrücktheit) develops gradually on the basis of the ideational life, reaching its fastigium slowly, mostly with nihilistic delusions, more rarely with those of a litigious character. To this group belong nine cases. In contrast to this there is another group which etiologically can be attributed only to the specific influence of solitary confinement. To this group

belong all those cases which develop rapidly without any prodromal symptoms, but which at once appear in their completeness. It is, therefore, an acute paranoia. This particular form of prison psychosis does not, according to Kirn, occur very frequently. He only observed four cases among his forty. The disturbance is characterized by the occurrence of numerous and intense hallucinations in all fields of the sensorium which are of a stable character, and completely transform the content of consciousness. In a euphoric and exalted mood the prisoner awaits hourly the pardon which was proclaimed him, the visit of some high personage, and is completely taken up with the difficult problem which confronts him. Wholly hallucinatory experiences in which most, or all of the spheres of the sensorium participate, may present themselves to him. This acute paranoia differs definitely from the chronic type, especially because it has a good prognosis.

Eight years later Kirn was again able to discuss this subject by means of his more extensive experience and greater amount of casuistic material. He had at his disposal at this time the clinical material of the Freiburg county jail, which came under his observation between February, 1879, and December, 1886, in all one hundred and twenty-nine cases. He again emphasized the extraordinarily deleterious effects of prison life upon the psyche of the prisoner, and maintained that without doubt solitary confinement had a graver influence than did mass-confinement. At the same time, however, he demonstrated that by far the greater majority of his patients were predisposed to mental disorder; only in 15 cases were such predisposing factors absent in the individual's life prior to his confinement, when the mental disorder had to be attributed exclusively to solitary confinement. From Kirn's investigations it further became apparent that the view expressed by other authors to the effect that the danger of mental disorder grows with the duration of the isolation was totally unfounded; mental disorders much more frequently developed in the first half year, diminished about the fifth month, were very much less fre-

quent in the second half year and entirely absent after the first year. The likelihood of the development of mental disorder becomes, therefore, less as time progresses; the individual becomes accustomed to the abnormal conditions.

Kirn divides his one hundred and twenty-nine cases into three groups as follows: In the first group (19 cases) he places those which were already affected on admission to jail. These were mostly grave, chronic disorders. In the second group (95 cases) those predisposed to mental disorder. These were wont to develop most frequently the acute psychoses, melancholia and paranoia; and the third group (15 cases) consisted of absolutely healthy individuals at the time of imprisonment, who also developed most frequently the acute disturbances, and had a favorable prognosis. Thus, according to Kirn, the psychoses of solitary confinement are characterized by a great preponderance of melancholia, and by the frequency of acute onsets. Aside from this, no other distinctive signs of its origin can be made out. Those cases, however, in which solitary confinement can be definitely considered as the etiologic factor, show a certain specific stamp. Kirn, therefore, reservedly established the dictum, namely "the more pronounced the predisposition which the prisoner brings with him to the prison the more likely it is for the psychosis developing subsequently to assume one of the ordinary forms of mental disorders, conversely, the less pronounced the psychopathic predisposition, the greater are the probabilities that the psychoses developing after confinement will assume a more specifically characteristic form." From the clinical point of view, Kirn divides his one hundred and twenty-nine cases into two great subdivisions, namely, the acute and chronic psychoses. These he subdivides again into numerous subgroups and forms. Among the chronic psychoses chronic paranoia with its nineteen cases without doubt is of especially frequent occurrence. These chronic delusional states he again subdivided into three groups. To the first group belong those cases of gradual, slowly developing paranoia not dependent

upon prison life. To the second group belong the majority of cases. These paranoid states may be considered as a further development of intellectual enfeeblement, as a transition of the psychic degeneracy into a chronic mental disorder. Along with hereditary taint Kirn finds in these cases an intellectual weakness which existed from childhood, which is manifested by a tendency to an inactive tramp-life, vagabondage and immoral inclinations. Very frequently these individuals are the terror of their neighborhood as the result of their extreme irritability. They are morally color-blind, and therefore lend themselves to the salutary influences of neither home nor school training or to the effects of repeated imprisonment. Their immoral existence and long prison sentence are still more injurious to them. Often mental disturbances had already occurred during previous incarceration, but were either not recognized or were only more aggravated by disciplinary measures. It is, therefore, impossible in many cases to fix the exact date of onset of the disorder inasmuch as the transition from congenital degeneracy into a psychosis is a very gradual one. In the course of the further development, hallucinations of all fields of the sensorium along with various delusions develop, such as were minutely described by Sommer. Kirn considers this form of chronic paranoia as identical with Sommer's prison paranoia. He proposes for them Delbrück's old name—the paranoia of the criminal in contradistinction to his acute form which better deserved the name of prison psychosis.

The third subdivision of his chronic paranoia differs essentially from the preceding one. Here it concerns individuals who do not belong among the moral defectives, who have not left behind them a criminal career. They become ill without any prolonged premonitory stage, develop insomnia and physical indisposition, and are rapidly attacked with numerous fallacious sensory perceptions. This acute paranoia which is to be discussed more in detail later does not, however, terminate in recovery. On the contrary, the delusional ideas become more and

more fixed and further elaborated by means of persisting hallucinations. In this way we get the development of chronic paranoia, setting in acutely with numerous hallucinations and delusions, mostly of a persecutory type.

Opposed to these chronic psychoses are the acute ones. These are again subdivided into two groups, according as to whether the basis for the development of mental disorder had already existed prior to imprisonment, or whether the main etiologic factor is to be sought in the imprisonment itself. To the first group belong the epileptic and alcoholic psychoses. In the second group we find three cases of acute mania, twenty-nine of acute hallucinatory melancholia, six of acute simple melancholia and, lastly, twelve cases of acute and subacute paranoia.

Of these, the hallucinatory melancholia and the acute and subacute paranoia are of especial significance. The hallucinatory melancholia had already been classed by Kirn in his former work as the most representative and characteristic psychosis of solitary confinement. It develops very rarely under other circumstances and is only sparingly found in insane asylums. The patients, among whom are many criminals by passion and first offenders, as a rule suffer severely from the effects of solitary confinement. They are remorseful for the deed which they have committed, become retrospective concerning their troubles, material and moral injustices and the misfortunes of their family. There develops a moderate depressive state, at times associated with lamenting and crying, but in most instances not reaching beyond moderate psychic depression. Simultaneously with this, insomnia, loss of appetite, digestive disturbances, pressure and pain sensations in the head, emaciation and more or less pronounced anemia set in. Following this preliminary stage, which is often of very short duration and, therefore, easily overlooked, but which is never wanting, the patient is suddenly surprised at night by hallucinatory experiences which bring on an anxious excitement. These manifestations become constant from now

on, in many cases occurring only at night, in others also in the daytime. Attentive patients not infrequently hear at first a humming and buzzing in their ears, unpleasant noises and inarticulate sounds which they cannot understand until finally they hear well differentiated sounds and distinct words and sentences. At this stage the sensory deliria become very active, the voices are distinctly heard and perceived and referred to definite persons, frequently friends or relatives, or to the prosecuting attorney and judge.

The hallucinations are very plastic and can be described as a rule in the minutest detail. Auditory hallucinations predominate; next come those of sight, but tactile and olfactory fallacious sensory perceptions also occur. The content of the voices is always of a depressive character and shows a certain similarity in all cases. Curse words of the most disgusting character, reproaches, various accusations, such as having been lewd, etc., frightful threats, such as that they will be robbed of the daylight or executed. They can hear shots fired, and various noises indicative of the preparation for their execution. The visual hallucinations are very vivid; the patients are frightened by threatening forms of scornful mien, by persons armed with knives, by evil ghosts, skeletons, black birds and the like. The state of anxiety often reaches a degree when suicide is attempted. During the more lucid intervals the patients are as a rule painfully oppressed or more rarely irritable and morose. Sleep is restless and disturbed, appetite bad, frequently they refuse to take nourishment, and complain of a characteristic pressure in the head. As long as the hallucinations persist the patients are totally dominated by them. They fully believe in their reality and frequently draw conclusions from their content which have the character of delusions. This heightened stage of the disorder lasts only for a short while if removal from isolation takes place in time and the patient is treated in a hospital ward. At first the hallucinations disappear whereas the belief in their

reality still persists then the depression becomes less severe, the anxiety states rarer and milder in character. With the return of normal sleep the patient's appetite improves, he assumes a normal affect-tone, the former hallucinations are perceived by him at their true value and he is again well. The duration of the disorder is anywhere from two weeks to six months.

As another characteristic of the mental disorder of solitary confinement, Kirn mentions an acute hallucinatory paranoia, a disorder which is closely allied to the acute hallucinatory melancholia previously described. Kirn considers certain of these cases as transitional states between the two psychoses. Notwithstanding their close relationship and their equally good recovery, they show a different mode of development. Whereas in the melancholia he always found a prodromal stage of depression, the prodromes of paranoia are limited to headaches, sleeplessness, anemia and alimentary disturbances, in certain cases a certain amount of irritability also exists. At times even the above symptoms are wanting and the psychosis sets in acutely with numerous hallucinatory disturbances without having evidenced any prodromal signs whatsoever. The hallucinations, with a predominance of those of hearing, are as a rule frequent and changeable. In certain cases, however, they may be of a more monotonous and quite stationary character. They are all very vivid, have a marked influence on the patient's affect-tone, which may fluctuate according to the content of the hallucinations, between wide extremes, and lead sooner or later to delusional formation. The content of the delusions and hallucinations is a very varied one, in most instances the patients hear persecutory voices, accusations, tauntings, allusions, which color the delusional ideas. Not infrequently there also develop grandiose ideas, the patient considers himself descended from a king, possessed of riches, etc. The acute paranoia differs from the chronic in that the various ideas are more vague in character, are not so well defined and systematized as those of the chronic dis-

order. Just as this disorder is less clearly defined than the acute melancholia, so too its prognosis is more uncertain and vague than that of melancholia. With proper treatment most of these cases after many remissions and exacerbations recover in a shorter or longer period. At first the hallucinations subside, the belief in the reality of the various delusional ideas is given up only later. Thus nine of the twelve cases recovered; in two the results could not be determined, and a third one passed into a chronic form of the disorder. The prognosis would have been still less favorable if Kirn had added his four cases of prison paranoia which also had certainly developed from this acute paranoia.[1]

[1] In an abstract of a paper on the prison psychosis Wilmanns has shown that by means of catamnestic researches of Kirn's cases, it is possible to solve certain diagnostic questions in this disorder. These investigations were carried out by Homberger. We quote certain clinical data from this work which will appear later. Of Kirn's one hundred and twenty-nine cases, one hundred and five could be followed to the end and definite diagnoses established. Twenty-four cases escaped investigation. Among these again are eleven cases which are no doubt chronic alcoholics, senile dements, and paretics. The rearrangement of the diagnoses, therefore, took place in the one hundred and five catamnestically reconstructed cases. Thirty-three were recognized as cases of dementia precox. Their division into early and late forms calls attention at the same time to the diagnostic variations and to the fundamental cause of these. Of the twenty-four belonging to the early forms of the disorder Kirn's opinion with respect to the prognosis was correct in nine. He erred, however, in the remaining fifteen, in which as acute prison psychoses, Kirn predicted a favorable prognosis. The late forms show an erroneous prognosis in two cases. The great majority of the unrecognized early forms, were, during the time of their imprisonment in Freiburg, in the initial stages of their psychosis, some in very acute phases of the same. Those judged correctly showed even to Kirn unmistakable signs of chronicity. After all, it is quite immaterial whether Kirn spoke of a chronic hallucinatory melancholia or a chronic paranoia, so long as he meant by this nomenclature a dementing process. On the whole it can be said, as Homberger shows in detail, that the majority of cases can now be correctly sized up from the material which was then at Kirn's

These views of Kirn were opposed several years later by Kühn in an excellent work on the insanities among reformatory inmates, without, however, taking into consideration that his material differed considerably from that which served as a basis for Kirn's conclusions. Kühn deemed it an error to establish special forms of insanity among prisoners because all the mental disorders which may be observed in them can be placed easily within the category of some of the mental diseases ordinarily known to us. Of course the deliria of a great many insane criminals, especially those suffering from paranoia (Verrücktheit), have certain features in common. Gutsch, Delbrück, Bär and others have indeed correctly observed this, but these cases do not on that account speak for a special mental disorder, and it is superfluous to give them a special name, as for instance, paranoia of the criminal (Verbrecherwahnsinn). The clinical characteristics which were reported by them do not justify the attributing of a special entity to these psychoses. Finally, Kühn especially criticizes Kirn's views. He does not believe that the

disposal. The clinical histories found in Kirn's records are not wanting in characteristic detail. His observations are in part exceptionally accurate and acute. He was deficient, however, in the view-points concerning the catatonic symptoms, and was ignorant of the importance of emotional dulness. However, it is just because he has to be recognized as a thorough and an independent observer that the differences in diagnoses and the real progress in this respect become apparent. Of special importance besides is the great percentage of defective and psychopathic individuals (76 per cent.) among Kirn's prisoners who suffered from dementia precox. Only in five instances Kirn predicted unfavorable prognoses, which the further course of the disorder did not bear out. This was caused in part by delusions which appeared as degenerative, in part by the long drawn out course of an acute prison psychosis. What Kirn designates as the acute stuporous, hypochondriacal, hallucinatory melancholias, are, according to our present conceptions, various types belonging within the realm of degenerative prison psychoses. His cases of acute paranoia with favorable prognosis belong likewise to this second great group of degenerative delusional types, which in all comprise forty-nine cases. Only in rare instances Kirn erred in his conceptions as

preponderance of hallucinatory experiences is a characteristic feature of psychoses originating in solitary confinement. The same thing is seen also in non-criminal individuals when acutely insane, or in the chronic insane when for any reason they have to be isolated. He further refutes Kirn's assertion that acute hallucinatory paranoia with depressive deliria, "the hallucinatory melancholia," is of such rare occurrence in freedom, but so frequently found among the criminal insane as to justify calling it a psychosis of solitary confinement. According to Kühn milder forms of hallucinatory paranoia do not infrequently occur among people at liberty. They subside, however, very rapidly so that they do not come under the observation of the asylum physicians. To the prison physician who, perhaps in this respect, has had no experience among ordinary individuals, these cases appear as something extraordinary. We see Kühn make the same argument against the views of Kirn, which Sommer in his day made with respect to Gutsch's observations. All cases of acute mania or melancholia which, as prison physician, he ob-

regards these highly suggestible reactionary forms which depended upon the milieu, and which had their roots in the original personality. That the differential diagnosis is much more difficult in a prison than in an asylum was shown by the subsequently dementing dementia precox cases whose early stages and acute phases were manifested in the prison cell. The manifestations of "feeling sick," the delusional content derived from the surroundings, the involvement of the individuality, gave the disease pictures that strong reactive coloring on which the diagnosis hung. Six cases which Kirn placed among those of favorable prognosis belong to manic-depressive insanity where the delinquencies were the result of either the manic or depressive phases as the case may have been. Thirteen catatonics were also recognized among his cases. The life histories of the one hundred and five cases, aside from the interesting clinical material which they furnish, showed a complete picture of the criminality of each individual case. In the degenerates it was possible to separate the juvenile offenders from the later criminals—the habitual from the reclaimed ones. The not inconsiderable number of the latter (17) shows that prison psychoses, though modes of reaction of the degenerative psyche, are not a sign of anti-social degeneracy.

served, called forth the question in his mind whether he was dealing with actual new psychoses occurring in a previously normal individual, or whether these were episodic manifestations in originally defective individuals, in insane, in epileptic, or paretic prisoners. He observed doubtful manic and depressive intervals in the course of similar mental disorders only rarely among inmates of reformatory institutions. Kühn's diagnostic tables, in accordance with his clinical conceptions, are in contrast to those of Kirn, very simple. Half of his cases he designates as paranoia (Verrücktheit).

Two years later there finally appeared the last more extensive work of the older school on this subject, namely Naecke's "On Crime and Insanity among Women." Naecke continued the work of Köhler, and studied the mental disorders of one hundred female patients at the Hubertusburg Insane Asylum. Forty-seven of these had been at one time or another in their lives in conflict with the law, and fifty-three were transferred directly from various prisons into the asylum. Naecke asserts that the majority of these cases had already been insane prior to their imprisonment, and that in those cases which had not been predisposed to mental disturbances the prison environment played no great part in the production of the disorder. Even in those predisposed it could not be definitely stated that imprisonment in itself was the exciting factor in the production of the psychosis. Mental disturbances occurred three times as frequently among long term prisoners as among short term ones. The majority of the cases became insane during the first years of imprisonment; body and mind once having become accustomed to prison life the danger of mental disorder was practically nil. Of the fifty-three patients, seven were epileptic and one a paretic. The remaining forty-five belonged among the ordinary mental disorders. In most instances they were considered as paranoia, only six having been designated as mania. In contrast to Kirn's findings, cases of melancholia were entirely wanting. Thirty-

five of the thirty-nine cases of paranoia were classed as hallucinatory confusion, a phase which frequently ushered in the disorder. Naecke agrees with Kühn that the acute hallucinatory melancholia is only a stage of paranoia. The description of this psychosis corresponds with Sommer's prison paranoia. Naecke does not see anything characteristic in it which would justify its designation as a prison psychosis. According to him there is no prison psychosis. The only characteristic features of the disorder found in prisoners therefore are, first, the predominance of primary dementia; second, the frequency of amentia and acute paranoia, and lastly, the relatively frequent termination of the psychosis in dementia.

Reviewing the literature thus far cited, one sees that the material from which the various investigators drew their conclusions was rather one-sided and uniform. Delbrück, Gutsch and Knecht investigated serious offenders with long term sentences, Kühn reformatory inmates, Köhler, Sommer and Naecke especially chronically insane inmates of asylums for the criminal insane, and only Kirn had the opportunity to observe patients who were sentenced for short terms of imprisonment. Little attention was, however, given by the alienists to prisoners awaiting trial.

Reich about 1871 was the first to touch upon these in an important work entitled "Concerning Acute Mental Disturbances in Imprisonment," in which he described nineteen patients who were taken ill either while awaiting trial or during a short term of imprisonment, and who were observed at Illenau. Among these persons we must naturally seek wholly different etiologic factors for the mental disturbances than among the previously described prisoners. The effect on body and constitution of a long imprisonment and the moral influence and greater punishment connected with it, are lacking here. The severe affect brought about by the emotional shock of the arrest, the preliminary hearings, and identification, an affect which could be set

aside much easier under ordinary circumstances than in imprisonment, is to be looked upon as the cause of the acute mental disturbances. Consequently, acute mental disturbances developed very early in confinement, in four cases within the first few hours, in six within the first days, and in nine within the first weeks after arrest. Reich divides his nineteen observations into three groups: The first two groups which will not be discussed in detail here, each contain only two cases. The third comprises the remaining fifteen, and is the most important one. These cases are characterized by peculiar disease symptoms, especially those by which, according to Reich, the acute mental disturbances of the imprisoned are distinguished. Reich describes this form as follows: "Already in the first hours or days after imprisonment, or soon after a severe emotional shock, a kind of psychic tension sets in. The prisoner becomes silent, chary of words, lost in brooding. He observes little of what goes on about him, remains motionless in the same spot. His face takes on an astonished expression, the gaze is stary, vacant, indefinite, not fixed on any object. If the patient makes any movements, they are hesitating, uncertain like those of a drunken person, vertiginous and aura-like sensations occur, a severe anxiety overpowers the patient and with the entire force of a powerful affect, crowds out all other conceptions and sensations and dominates the entire personality. Consciousness becomes more and more clouded, soon there appear illusions, hallucinations and delusional ideas, especially the conception of unknown evil powers, of spirits and demons, and of demoniac persecution and possession. Simultaneously the patients complain about all kinds of sensations. In isolated cases one may observe convulsive twitchings of both the voluntary and involuntary muscles. Finally severe motor excitements set in. The patient becomes noisy, screams, runs aimlessly about, destroys and ruins everything that comes in his way. With this the disease has reached its height and at the same time a stage necessitating his transfer to a hospital."

Among the symptoms mentioned by him as especially characteristic of this disorder, we would mention the clonic muscular twitchings observed in many cases, contractions which convulse the limbs like electric shocks, in one case increasing to an actual subsultus tendinum, and above all the profound disturbance of consciousness which Reich considers decisive. At the height of the disease consciousness is entirely abolished, and later there is complete amnesia for all events during this time. In other cases, the psychic activity has become absorbed into an hallucinatory dream-life, of which more or less clear memory pictures remain, and which may be interrupted by temporary moments of clear consciousness. The patient often no longer recognizes his environment and the people about him. If the disturbance abates he frequently wakens as from a dream. Relatives, who in several cases were permitted to enter unexpectedly in order to take by surprise a possible simulation, called forth neither astonishment nor the expected surprise. The aura-like manifestations preceding the unconsciousness involuntarily remind one of similar epileptic conditions. The disease has a favorable prognosis, seven cases recovered in a short time. Four of these could be discharged as cured after only four weeks. Five cases, however, passed into secondary demential states. The exhaustive and vivid disease pictures admit no doubt in a number of these cases that they concern essentially different processes. Reich himself supposes that this acute prison psychosis, because of its nature and clinical picture, may be included in that large group of psychically abnormal processes developing from affect and affect-like conditions although it is apparently peculiar because of the foreign ground from which it sprung. In passing, we would mention that Reich combines the manifold other disturbances of the criminal insane which do not find their exciting factor in the imprisonment itself under the name of pseudo-prison paranoia (Pseudogefangenenwahnsinn). Among these he includes the demented and weak-minded alcoholics, paretics and epileptics.

For very many years this work was the only one which dealt in detail with the psychoses of prisoners awaiting trial. Not until 1888 did Moeli in his well known monograph on criminals, call attention to a symptom-complex which, although often described, had never been correctly explained. He spoke of patients in whom an apparent forgetfulness of well-known facts, such as their age, the multiplication table, inability to recognize coins, went alongside with the advancing of positive untruths concerning their former life. At the same time it was noticed that although the answer was false, it had a certain relation to the question, and showed that the circle of correct conceptions had been touched. For instance, a dollar was called a quarter, a postage stamp, paper. This failure of the simplest thought and memory activity in an otherwise well ordered demeanor naturally aroused the suspicion of simulation, but Moeli designates it as a not infrequent disease symptom, especially among prisoners awaiting trial.

The observations of Moeli remained unnoticed. Neisser and Dietz in 1893 and 1897, again described such patients as malingerers. The knowledge of this disease picture became better known by Ganser's publication. He also had repeatedly noticed in prisoners awaiting trial that they were unable to answer questions of the simplest kind put to them although they showed by the nature of their answers that they had pretty clearly grasped the sense of the questions, and that their answers betrayed rather a disconcerted ignorance, and a surprising loss of knowledge which they certainly had possessed formerly, or of which they were still in possession. Ganser's patients, in contrast to those of Moeli, showed a very conspicuous demeanor from which it was plainly to be seen that they were suffering from vivid visual and auditory hallucinations. At the same time there existed a more or less distinct clouding of consciousness with the concomitant presence of hysterical stigmata, especially total analgesia. After a few days, the disease was cured, the patient sud-

denly awoke as from a dream and had a more or less complete amnesia for the occurrences during the period of clouded consciousness.

This unusual disease picture has since then become the subject of numerous publications under the name of the Ganser twilight state (Ganser syndrome): Jolly, Moeli, Neisser, Raecke, Westphal, Lücke, Foerster and others have since devoted especial attention to it. Hey has written a monograph on it. Of the various works we will mention only Raecke's publication, especially as it forms the basis of a later work by the same author.

Raecke designates this picture as described by Moeli and Ganser as an hysteric twilight state developing in psychopathic or weak-minded persons in confinement as the result of emotional excitement. The continual hearings, the confusing cross-questions, the excitement and fear of punishment, finally the ill-effects of solitary confinement, shock and weaken the slight mental tensile strength of the prisoner to such an extent that on the one hand a condition of apathy, of inability to concentrate, a feeling of incapacity to think, and of being wholly at sea sets in accompanied by vertigo, headache and other nervous complaints; while on the other hand, the physiological despair, the obstinacy of the prisoner now increases to pathological manic attacks, now changes to stubborn negativism, sitiophobia and mutism. At the same time the more or less conscious wish to be considered sick, and in consequence of that, to be freed from imprisonment, may influence deleteriously and in a peculiarly modifying way the disease picture. The simple questions put to the patient by the physician may influence him as so many suggestions. Raecke calls attention by means of simple and instructive case histories to the manifold similarities which these conditions may show to catatonic processes. He shows that also in these hysterical twilight states, quite aside from mutism, negativism and catalepsy, peculiar mannerisms were noted, an affected, childish way of speaking, motor stereotypies, swaying of the head, running in a

circle, queer actions, abrupt elaboration of wholly senseless word combinations, etc. In a yet much more pronounced measure these catatonic symptoms may be found in the disease picture which Raecke designates as hysterical stupor in prisoners, and to which he devoted his next work. The severe forms of this condition, which may extend over weeks and months, are liable to be confused with progressive processes, especially as the symptoms which have been considered by many as positively unfavorable prognostically may be found here in very deceptive imitations, that is, the affected, silly manner, impulsive actions, temporary verbigerations, word salad, grimacing, stereotyped attitudes, etc.

Hysterical stupor, according to the view held by Raecke, is closely related to the Ganser twilight syndrome, stuporous conditions may introduce the latter, and, vice versa, Ganser complexes may creep into the stupor. Raecke's stupor, like Ganser's twilight syndrome, frequently develops in criminals either immediately after arrest, or as the result of physical or psychic exertions. Sometimes the stupor is preceded by a convulsive seizure, in other cases by a prodromal stage with general nervous complaints. The stupor follows immediately upon this prodromal stage, or a short mania with clouded consciousness supervenes. In contrast to the catatonic condition the stupor as well as the Ganser twilight-state is characterized by a high grade of impressionability by occurrences in the environment which at any time may cause a sudden transition from apparently deep stupor to normal manner and behavior. Headaches, vertigo, and hysterical stigmata are common to both the stupor and the Ganser twilight syndrome. Improvement sometimes takes place suddenly, but as a rule is gradual and fluctuating. The duration of the disorder varies. It may last from hours to months. There is generally a more or less pronounced amnesia for the occurrences during the stupor.

SECOND PERIOD

Already in the works of Sommer, Naecke and especially Kühn, the conviction gradually gained ground that the disorders described by Gutsch and Kirn as melancholia were in a large measure only phases of an extremely varying disease picture, which was called by them at one time prison paranoia, at another, simply paranoia. These views prepared the way for Kraepelin's teachings of dementia precox which as everywhere else worked in a fructifying manner in the field of the prison psychoses.

Under the personal influence of Kraepelin there appeared Rüdin's first work concerning the clinical forms of prison psychoses. As the basis for his dissertation he had those patients admitted during nine years (1891 to 1900) to the Heidelberg clinic, patients who were either taken ill in the prison itself or suffered there a severe exacerbation of a disease acquired earlier. Among his cases there are eighty-four men and ten women. A review of his diagnoses will show us that the author could not form a decisive opinion in seventeen cases; nine cases were diagnosed as alcoholic psychoses, eight as epilepsy; three as hysteria, three as paranoia and three belonged to rarer forms of disease. The remaining fifty patients, that is 33 per cent., were diagnosed as catatonia, *i. e.*, as demential processes which in fact differed in no way from types which are quite different in the beginning but towards the end of their course grow more and more alike, and all of them finally terminate in the peculiar catatonic dementia. The first and the most numerous type Rüdin calls the vagabond type (Vagantentypus). Of these there were thirty-one cases in all. These he again subdivided into several subgroups which will not be entered into closely here. In all of them after an average or excellent development in youth, an as

yet unknown causative factor arose, changing entirely their personality and make-up. Later, in all, were seen excited states, those well known pictures of catatonia. All ended in the dementia so characteristic for this disease. In some of the cases a vagabond life preceded the actual disease; in others it followed it, and in fact the disorder sometimes expressed itself in insidious changes, at other times in acute disturbances. As a second type Rüdin describes the group of habitual criminals, in all eleven cases. This includes individuals inclined from youth to crime, those who have passed through numerous punishments for theft, embezzlement, rape, assault, etc., and who finally when placed in solitary confinement, developed catatonia.

Before this disorder developed they showed no traces of mental disorder. There were, it is true, many cases not entirely normal psychically, in no way, however, persons with hebephrenic traits. Rüdin does not consider himself justified, therefore, in dragging in the former life of these patients as prodromal stages of catatonia. He asserts that one must leave it to the future to show whether in these cases criminal life and late catatonia belong clinically together, or whether the latter breaks out on the basis of the crime without being related to it in any way.

Finally, the third group, eighteen cases in all, is formed of healthy individuals, who, though partly endowed with unfavorable qualities, were arrested on account of some one serious criminal deed or felony. Five cases of these occasional criminals showed acute, three subacute, onsets. All of them presented the typical picture of catatonia. Whether they were already ill at the time of the commission of the act cannot be said with absolute certainty. Certainly their behavior during the trial and investigation caused no suspicion of mental disturbance. These investigations led Rüdin to the conclusion that an actual prison psychosis does not exist as a clinical entity, but that imprisonment may modify in a characteristic manner the symptoms of all mental dis-

turbances so that every psychosis occurring in prison may temporarily show a symptom-complex such as had already been long ago described in an excellent manner by Gutsch, Kirn and others.

This symptom-complex, a peculiar hallucinatory episode, Rüdin found in twenty-eight of his cases, viz., in fifteen catatonics, three epileptics, one hysteric, one litigant, one sexual pervert, one imbecile and in six clinically undifferentiated cases. Solitary confinement or a long series of former punishments in connection with a rather curtailed freedom in mass-imprisonment was the cause of the outbreak of the prison symptoms which immediately disappeared upon the removal of the exciting factor. The original disorder on the basis of which they had developed alone remained. Rüdin thought it conspicuous that the hallucinatory episodes developed not only in diseases in the course of which hallucinations are an everyday occurrence, but also in those forms where they are extremely rare, as in imbecility and in the psychopathies. But even in these cases Rüdin is not inclined to see a special independent prison psychosis; an acceptance of that would, according to his views, have to fulfil the following postulates: First, the symptom-complex need not necessarily develop on the basis of a psychopathic personality. Second, onset and course of the disorder must be typical. There must be either recovery or termination in a dementia characteristic of the disease, and differing wholly from others, especially from the catatonic end results. Third, the observations upon a patient developing this symptom-complex during imprisonment must extend over his entire life, both before and after imprisonment. This supposition Rüdin believes he has fulfilled in a number of cases which he observed several years later as voluntary physician in the insane division of the state prison at Moabit, and which he designates as a form of acute hallucinatory, persecutory delirium[2] in imprisonment without further development of the delusional system and without correction. This concerns itself with three abnormally predis-

[2] Delirium is here used in the sense of the French "delire."

posed habitual criminals, who after a two or three years' imprisonment suddenly developed, without any premonitory signs, fallacious sensory perceptions while in solitary confinement. The hallucinations appeared chiefly in the auditory sphere, but visual and very exceptionally, tactile hallucinations also occurred. These hallucinations were vivid, persecutory in character, bearing throughout the stamp of reality, and were referred to definite persons in the environment, chiefly those who had to perform important functions in the carrying out of the punishment. There quickly appeared on the basis of these combined and elementary hallucinations of hopes, expectations and fears which entirely dominated the prisoner, and the elements of which were the more powerful because of the changed affect-tone, as a systematization, though not very extended, with a persecutory trend. The explanation of the supposed destructive plots and attempts at annihilation cannot be ascribed to feeble-mindedness, but keep well within the sphere of reason, if the subjective reality of the hallucinatory and illusional experiences are kept in mind. While the patients maintain with great emotion and unshakable conviction the reality of the persecution which they have perceived with their own senses, and energetically protest against any presumption of mental disturbance, numerous simultaneously appearing symptoms, such as headache, insomnia, hypersensitiveness to external and internal stimuli, loss of appetite, etc., awaken a marked physical disease feeling. All taken together, the feeling and the clear conviction that their existence is threatened, the disturbing constitutional symptoms which are mostly conceived as direct or indirect results of murderous plans, make the prisoner irritable, suspicious and anxious. Just this severe irritable affect is the characteristic feature of the whole course of the disorder. It is true, the mood often changes in its intensity, especially if the disease lasts somewhat longer. Under the immediate influence of new onslaughts of disappointments, rage and despair often break forth in a powerful manner, but the homogeneity of the affect

remains intact. There is never a sudden turn of mood as a result of joyous feelings or inner experiences; joyous news concerning proof against the planned destruction or the promise of influential help against the persecutors, influence, if at all, only very temporarily, the anxious and embittered soul of the patient. This vivid affect, the active interest in the occurrences in their environment, the formal correctness and naturalness in word, script, and demeanor, is especially emphasized in contrast to similar symptom-complexes of dementia precox. It is of especial importance that a further development of the delusional system of definite persecutions founded mainly on hallucinations appears with the disappearance of the acute symptoms or often even earlier than this. Insight into the morbidness of the belief that they are, or have been persecuted, exists neither at the time of the acute symptoms, nor for a long time after their disappearance.

According to Leppmann this will develop in freedom. The disease duration extends over some months, sometimes a year. The memory for events during the illness through which they have passed was generally good. Amnesic gaps, as well as other hysterical symptoms, were lacking. Rüdin leaves the question unanswered whether this peculiar disease picture occurs exclusively on a soil of crime, and under the influence of prison life, or whether it may also be met with among irreproachable persons at large. Leppmann, in an appendix added to Rüdin's work, expresses the conviction that the cases described concern a psychosis which develops in a normal psyche through the continued influence of imprisonment and may be favorably influenced through changes in the prison conditions. Leppmann, however, cannot see in it a special prison psychosis, but rather believes that he has seen similar symptom-complexes develop in freedom under similar conditions.

A year later, there appeared a work by Skliar, the basis of which was sixty case histories which he had collected from various insane institutions in Switzerland. Skliar differentiates among

these five alcoholic deliria, twenty-one acute prison psychoses, twenty-one dementia psychoses, and thirteen cases of paranoia. The development of the acute prison psychoses is looked upon as very characteristic. After a short prodromal stage, introduced by irritability and depression there develop quickly, mostly in the first days of the imprisonment, sometimes even in the first hours, manifold, anxious, mocking auditory hallucinations, fear-creating visual hallucinations, and in severe cases, even those of smell, taste and general sensation. Delusional ideas of being killed, burned, decapitated, or innocently condemned, also develop. The patients become senselessly anxious, restless and violent. At the same time there exists depression and disorientation, while often a stupor with catatonic symptoms, negativism, mutism, constrained attitudes, interchanging with furious attacks of mania, develops. The disease reaches its height in from one to two days, and is very quickly cured, even inside of hours or days, upon the transfer of the patient to an insane asylum. In rare instances recovery sets in after a more prolonged period.

The description which Skliar gives us of the acute prison psychoses reminds one strongly of Reich's delineation. The author has also so far as the extremely meager histories permitted of a conclusion, generally judged his patients correctly. But it is an incorrect observation of Skliar wherein he claims to rediscover the same symptoms in acute prison psychoses which he found in the development of dementia processes in paranoiacs, and without further discussion designates them as of equal importance. Hence nobody will be inclined to agree with the solution which Skliar finally gives us to the difficult question, namely, "in solitary confinement there develops mostly an acute prison psychosis which is cured by the abolition of imprisonment, but which passes into a dementing psychosis if the imprisonment, especially solitary confinement, continues for a more or less prolonged time after the disease sets in. In mass-imprisonment an acute prison psychosis may likewise develop, but generally after quite a long time, and here we may be dealing with a true paranoia."

Longard had previously, in an address before the Prison Society of Cologne, called attention to a special form of quite acute mental disturbance which he had observed in prisoners awaiting trial. He makes solitary confinement principally responsible for its development, because he did not meet it with the same frequency among prisoners awaiting trial in mass-confinement. The form of this solitary confinement psychosis was a violent hallucinatory confused state which set in mostly with severe manic excitement accompanied by many visual and auditory hallucinations of a threatening nature. Those attacked were in the majority of instances healthy, strong individuals who had formerly been entirely normal and did not look back upon a long career of crime. He never noticed these psychoses in habitual criminals upon whom imprisonment no longer makes the slightest impression. The disease was strongly influenced by change of environment, and was cured in a short time after the patient had been taken to a hospital and placed in a room with other patients under proper care. This acute hallucinatory confusion Longard designates as the characteristic solitary confinement psychosis among prisoners awaiting trial. It is much rarer among the condemned prisoners. The psychoses of the latter do not differ from those of the free population, only the numerical relation of the different disease groups differs from that in liberty. Mania, melancholia and paresis appear much less frequently than paranoia and the various forms of dementia.

We will consider only hastily the work of Mönkemöller as it devotes itself more to practical questions, and only superficially and in a less happy manner touches upon the clinical aspects. Hence we will only mention that he too does not recognize a prison psychosis as a disease *sui generis,* but agrees with the opinion advanced in Rüdin's first work, according to which imprisonment may give a certain common coloring to the clinical pictures of various disease processes.

According to Mönkemöller this concerns essentially halluci-

natory episodes of longer or shorter duration which may show at one time the characteristics of melancholia, at another those of paranoia, and above all those of acute paranoia (Verrücktheit). Whether these acute psychoses become chronic or not, depends, according to this author, essentially upon the treatment, that is, upon the cessation of imprisonment. The mistaking of this disturbance and the frequent disciplinary punishment only too readily forces the disease into a chronic course.

It is likewise unnecessary to go into the thesis of Hoffmann concerning prison psychoses and psychoses in prison. The author attempts in the main to prove by a number of illustrations the frequency of simulation in prison. We hear nothing new or noteworthy concerning clinical questions.

The thesis of Pollitz concerning solitary confinement and insanity deserves a brief mention. Pollitz is head physician in the insane department of the prison at Münster in W. He is decidedly opposed to the claim that solitary confinement more frequently calls forth mental disturbances. In only eight or nine of the sixty-four mentally disturbed apportioned to his department and coming from solitary confinement could Pollitz connect appearance, course and form of the disorder in any justifiable manner with their imprisonment, or ascribe to the solitary confinement a definite share in the outbreak of the disease.

THIRD PERIOD

We must review carefully the comprehensive and almost exclusively clinical work of Siefert, physician in charge of the observation station for the insane at Halle. Siefert bases his results on the observation of eighty-seven patients. These he divides into two sharply differentiated groups, the degenerative prison psychoses and the true psychoses; to the former belong fifty-four cases, to the latter thirty-three.

The degenerative mental disorders are products of predisposition and environmental influence. They bear a close relation to the deleterious effects of imprisonment, are influenced to the greatest degree by the change of milieu and occur predominately in the habitual criminal in his third decade of life. The morbid predisposition upon which, under the influence of imprisonment, the prison psychoses develop, is well characterized by: "changeability, irritability, autochthonous fluctuations of mood, phantastic day-dreaming, exaggerated subjectivity to the environment with inability to assume a stand-point of correct critical judgment concerning unpleasant occurrences in their surroundings, and a marked suggestibility. The foregoing are common manifestations in the psychic sphere of these individuals. The tendency to headache, to migrainous attacks, restlessness, a feeling of anxiety often associated with disturbances of cardiac action, hypochondriacal complaints, a tendency to become easily tired on mental and bodily exertion, intolerance and pathological reactions toward alcohol, etc., complete the picture on the neurological side. An element of intellectual weakness is often to be found, but only seldom intensively represented, and even then its significance for the individual and his social development can only take a secondary place to that of the affective disturbance." The degenerates growing up in an unfavorable milieu break down even in childhood, while

those developing under more favorable circumstances manifest these traits at a later age. The injurious effects of an unstable, dissipated existence, a life full of privation, serve to exaggerate the pathological elements, "until after a number of years (almost all patients were in the third decade of life) often apparently suddenly or indicated by premonitory signs, collapse occurs in prison. Psychotic symptom-complexes now flare up and illuminate grimly the individual's past: thus we see deliria, convulsive seizures, delirious confusional states, psychotic intensifications of the underlying character, wild phantasies of unlimited variation appear and disappear in a characteristically remitting course. While they are still recent and dependent upon the prison environment, medical interference may be of practical value." Medical interference is of no value if the anti-social tendencies have become fixed to an excessive degree, if the specific deleteriousness of a prolonged imprisonment has clouded, distorted and obfuscated the individual's entire mode of thinking; or if the phantastic and paranoid constituents have produced psychotic elements of which the patient can no longer rid himself. This is likewise true if the enfeeblement of judgment, the irritable subjectivity and paranoid predisposition have produced incorrigible delusional pictures and the plastic hallucinations (which so easily occur under the influence of solitary confinement in these patients already so prone to hallucinatory delerioid states) have become fused with other pathological elements. There then develop disease pictures of a complicated aspect, imitations of true psychotic processes which frequently can only be worked out with difficulty, and which analysis finally shows to be of the prison psychotic degenerative type. This becomes especially clear if the degenerative process, its relation to simple degenerative conditions, the noteworthy fluctuating manifestations which are so dependent upon environmental conditions, the frequent extraordinary phantasy which is something altogether different from a true grandiose delirium, the remarkably restricted persecutory delusional formation, the artificial,

often conscious, admixture of acquired symptoms picked up here and there, are taken into consideration and properly evaluated.

Siefert divides his fifty-four cases of degenerative prison psychoses into the following not sharply delimitable groups:

I. *Hysteriform degenerative states:* Evident cases of grave hysteria with convulsions, physical stigmata, endogenous states of ill temper, confusional and Ganser twilight states, etc.

II. *Simple degenerative forms:* These differ from the first group in that the hysterical stigmata, convulsions, etc., were discoverable neither in the anamnesis nor during the time under observation. In some of these cases, it was the degenerative antisocial character-anomaly of the most severe and no longer corrigible type which brought about medical interference; in the majority, however, various psychotic processes in the form of motor excitement, fearful delirious states, mutism, etc., developed.

III. *Phantastic degenerative forms:* Profoundly degenerated personalities with markedly increased imaginative faculties, marked auto-suggestibility, inclination toward swindling and lying, hysterical stigmata and endogenously produced fluctuations of mood. On this soil there develop states of pseudologia phantastica, systematized delusions of all sorts and delirious psychoses.

IV. *Paranoid degenerative forms:* First, the litigious form. The litigious element gives to the groundwork of the prison psychosis its unique coloring. Some cases have been known as litigious paranoia (Querulantenwahn). The litigious paranoia is not really a disease type *per se,* but only an artificial creation depending upon the make-up and external influence, a psychosis which, in one of its multiform types, develops in free life only very seldom, but in prison with greater frequency.

Further, there belong here the hallucinatory paranoid forms: Hallucinations and delusions of persecution supported by a hypochondriacal element produce disease pictures which show an extraordinary similarity to the true paranoid formations and in no wise impress one as prison psychoses of degenerative origin.

V. *Prison psychotic states with simulated symptoms:* These to Siefert point to a type, the artificial prison psychotic symptoms of which compel the assumption of conscious deception.

VI. *Dementia-like states:* Individuals in whom the criminal career began early in life and whose past shows no record of previous attacks, but who after an unusually prolonged imprisonment (up to 15 years) quite gradually and slowly develop a peculiar behavior which leads to frequent infractions of institutional discipline. They refuse to attend divine worship, to perform the required work, and insist persistently on their discharge. When finally transferred to the department for the insane, they showed no definite hebephrenic demential manifestations, but evidenced, in spite of a comparatively youthful age (one was only 35 years old), a more or less marked appearance of dementia and an insane behavior. Only one of these patients in whose case a complex, prolix, and in part unintelligible letter is quoted, is described in a few words as being generally well composed and orderly, but capricious and stereotyped in behavior, hardly paying any attention to his surroundings, but occupying himself exclusively with the most profound scientific and religious problems. Siefert is inclined to the opinion that here we have to deal with an artificial product of imprisonment which develops in a slightly feeble-minded degenerate possessing a tendency to phantastic and sentimental phraseology.

These are the prison psychoses. Siefert was not able to agree with the opinion of those who fundamentally identify these psychoses with those occurring in free life, and who, at the most, admit that imprisonment lends to them certain peculiarities not in themselves essentially characteristic. To him, the prison psychoses are a reaction of a pathologically organized brain to definite pathologic conditions of life, nothing more than irradiations, distortions, and new formations, resulting from the same causal factor which produced the crime.

In sharp contrast to the above described forms (quite as much

as the contrast of paresis to neurasthenia) stand the true psychoses. In the true psychoses with a progressive tendency dependent upon organic causes, "the inner relation between the original make-up, the crime and mental disorder, is observed but vaguely; here the uniform monotony which is concealed only of necessity by an artificially erected symptomatologic polymorphism is lacking. Here the significance of the milieu as a provocative and curative factor in the psychotic state disappears." The true psychoses originate in and grow out of inner causes; they take possession of the personality, change and destroy it, according to organically determined laws and put in its stead a something, wholly new, a psychotic personality borrowing only insignificant characteristics from the particular environment. Criminal life and mental disturbance are no longer branches of the same stem, but either the individual develops the psychosis and as a result of the change of personality thus occasioned falls into criminal habits, or we are dealing with an habitual criminal in whom the psychosis develops without definite relation to the criminal make-up just the same as in a law-abiding, non-criminal individual in freedom. Siefert admits as a third possibility that the prison psychotic symptom-complex in its common form may develop upon an organic psychotic basis but he himself, however, thinks that this is only rarely to be observed.

Among the true psychoses, first of all, the senile conditions are wanting, in spite of the fact that deteriorated seniles are prone to be interned in great numbers in penal institutions, on account of sexual offences. Likewise, the alcoholic psychoses are wanting, nor do alcoholic deteriorations appear as a foundation for prison psychotic disturbances (aside from delirium tremens which very frequently develops in connection with solitary confinement).

Thus the true psychoses are divided into:

I. *Paretic conditions,* which appear less frequently than in free life.

II. *Epileptic forms:* the epileptics of the prison are not very different from those of free life.

III. *Progressive feeble-minded forms:* congenital feeble-minded conditions which after years get worse and express themselves clinically by more or less complete transformations of the personality with the appearance of grave psychotic irritability and invectiveness. Definite causal relations between prison and progression are not to be confirmed (Kraepelin's *Pfropfhebephrenia*).

IV. *Hebephrenia, catatonia, and other chronic psychoses:* In sixteen cases, Siefert believes the entire criminal career must be regarded as a result of an already existing mental disorder. As proof of this view he can, however, in many instances merely cite the fact that the criminal career first began after the eighteenth year, while the originally habitual offender would be expected to become criminal earlier.

In the remaining six cases in whom criminality began in early youth, he leaves it an open question whether the psychosis itself reaches back to childhood, or whether we have to deal perhaps with a degenerative criminal who like any other person develops a chronic psychosis.

In the differential diagnosis as opposed to the prison psychoses, Siefert selects the following important symptoms from those common to other psychoses. The association of persecutory and grandiose ideas, an absurd interpretation of hypochondriacal sensations, a general projection of the delusions upon the entire environment (in the prison psychoses these are never projected upon fellow prisoners), self-accusations, physical explanatory deliria. Intense emotional states with persistent insomnia, danger of suicide and self-mutilation as a result of hypochondriacal sensations, characteristic neologisms, etc. On the other hand, according to the opinion of Siefert the narrowness of the paranoid field, its limitation to immediate surroundings, is in favor of the prison psychoses. He attributes great diagnostic value to the influence of the change of milieu on the expression of the disease for "when a disease whose symptoms and development must be considered absolutely as chronically progressive suddenly becomes

cured when the patient is placed under different surroundings, it must follow conclusively, and of natural necessity, that it is not an organic disease process which has produced the psychotic condition, but the milieu; in other words, the psychosis is a prison psychosis."

The consecutive series of Siefert includes eighty-three cases, fifty of which were prison psychotic states, while thirty-three were psychoses in the narrower sense, or respectively sixty to forty per cent., in which forty per cent. the epileptic and profoundly feeble-minded are not excluded (without these the relation would have been sixty-one to thirty-one per cent.).

Bonhöffer finally reached opinions similar to those of Siefert in a work which appeared in 1907, after the examination of the material of the Breslau Psychopathic Institute for insane criminals. If we glance at the table of Bonhöffer's diagnoses, we see an arrangement similar to that given in Siefert's table. The relative percentages, however, show very important differences: Bonhöffer observed among his cases 41 per cent. of simple dementing processes as opposed to Siefert's 31 per cent., while degenerative prison psychoss (33 per cent.) are almost by one half rarer than Siefert found them, and still lower than Siefert's 60 per cent., if we include imbeciles and cretins. As we might expect, Bonhöffer's material did not differ essentially from that of Siefert's; these differences must depend on the divergent clinical and diagnostic views held by the two authors. Evidently Siefert includes under the prison psychosis certain cases which Bonhöffer considers as dementia precox and epilepsy.

Bonhöffer's material, apart from this, again confirms the conclusions previously reached concerning the frequency of paresis, manic-depressive insanity and simple simulation. The cases considered as dementia precox show, in his opinion, nothing characteristic. On the other hand a large number of degenerative psychoses give a unique character to the prison material. Bonhöffer endeavors to segregate from the manifold pictures several

groups and begins with a description of three well-defined symptom-complexes.

The first group Bonhöffer designates as a simple paranoid disorder, if one wishes, an acute paranoia, on the basis of a characteristic degeneracy, the erethistic debility which is well defined by a combination of superficial endowment, feeble comprehension, a tendency toward change of occupation and early criminality. The psychosis stands in direct contrast to the original personality. During imprisonment there develops along with retention of mental acuity and allopsychic orientation, an acute paranoid symptom-complex. Amidst an acute anxiety state there develop ideas of reference, ideas of influence, isolated hallucinations, an obsessive tendency toward a depressive recapitulation of the individual's past, nervosity and irritable depression. Of interest was also the psychotic evaluation of dream experiences which were manifested by ideas of having been nightly tortured, beaten and choked. The duration of the disorder, which may show a remittent course, varies from several months to two years. The delusional formation progresses only for a short time and in no instance leads to a retrospective change of the content of consciousness. More frequently the process subsides quickly without leaving an alteration in the personality upon the termination of the imprisonment and the transfer of the patient to another environment. Insight is not always complete, the ideas of reference and the ideas of prejudice directed against the institution personnel may remain uncorrected.

These psychoses can in no wise be included among the known forms of dementia precox, manic-depressive insanity or epilepsy. The course, however, reminds one of hysterical states inasmuch as the intensity and the disappearance of the manifestations show a definite dependence upon environmental circumstances. The confabulations of being beaten and choked which have their source in the anxious dreams, also remind one of hystericals. On the other hand, the uniformity of the anxious delirium of reference, the isolated phonemes, the fully adequate paranoid affect, the re-

tained consciousness, the completeness of the delirium of explanation are entirely lacking in the hysterical character. We have to deal with psychoses arising on a basis of simple degeneracy which, just as is the case in endogenous hysterical or epileptic soil, furnish a predisposition to definitely colored episodic psychic disorders.

Whereas the "acute paranoia" stands in direct opposition to the original personality, the second group comprises psychoses which are to be considered solely as an exaggeration of an already existing paranoid disposition. The paradigm of this mental disturbance is the litigious paranoia (Querulantenwahn). In inconvincable, stubborn, fanatic individuals, there develop under favorable circumstances hyperquantivalent ideas in the sense of Wernicke, which as a result of their strong affective value, lead to frank psychotic symptoms, to positive and negative falsifications of memory, to pathologic auto-references and explanatory delusions in accord with the content of the dominating idea. These conditions which correspond with the litigious paranoia (Querulantenwhan) rapidly disappear along with a marked gain in bodily weight upon removal to a hospital for the insane. They are therefore curable. Bonhöffer believes that these cases in which the question is solely one of paranoid episodes in abnormally predisposed individuals, represent above all the more frequent type of course of the litigious paranoia. To speak in such cases of pseudo-querulants, is entirely inappropriate. We are dealing here with genuine delusional formations developing on a basis of hyperquantivalent ideas and deliria of reference with genuine falsifications of memory as far as the dominating trend of thought is concerned. These cases, according to Bonhöffer's opinion, are closely related to the entire psychotic pathological mechanism of the true paranoia of Kraepelin in the narrowest sense. They are to be considered solely as reactions of a temperament predisposed to the development of hyperquantivalent ideas, liberated by external causes.

In the third group Bonhöffer describes a series of interesting

cases in which "the lability of the ego" is a most striking manifestation. The individual cases differ very markedly one from the other. Two of these became ill subacutely in prison with an original delusional system composed of a delirium of reference and retrospective memory falsifications which slowly receded and led to complete insight. Both patients were considered incurable, and in the one case the sudden appearance of distinct grandiose ideas entirely in contrast with the original personality and mode of life of the individual, reminded one of hebephrenia, but the patients remained active, mentally alert, always controlled the situation and evidenced neither mannerisms, intelligence defect or emotional dulness. The subacute onset in relation to the rapidity with which the entire situation was reversed and the associated marked tendency toward memory falsifications are of interest retrospectively in contrast to other chronic psychoses.

Bonhöffer places these cases in close relation with the phantastic swindlers and presents further cases in which the characteristic feature is the peculiar transition between phantastic pseudologia and original delirium. One case had a certain similarity to chronic paranoia for which it had previously been taken.[1] This similarity, however, existed only in so far that the delusional system had the character of persecution and grandeur. The most essential symptom of chronic paranoia, the delirium of reference, however, played only a subordinate role; the tendency toward confabulation was more primary, the patient auto-suggestively entered into his delusional ideas.

In two further cases, there appeared after an unpleasant prison life, peculiar excitements which manifested themselves in the production of senseless phantasies, grandiose writings which from the nature of their origin, gave at first the impression of

[1] This very instructive case was again later considered by Birnbaum in his "Psychosen mit Wahnbildung usw."; by Svorcik in a publication for H. Gross' Arch., XXVIX, and lastly by Pappenheim ("Neuer Pitaval," V, f. 1 and 2).

intended boasting, in their further course, however, at times at least, that of auto-suggestions and correspondingly influenced the entire conduct of the patient. In both patients the peculiar emotional state which was present, the indifference and calm could easily lead to faulty diagnoses. Bonhöffer justly calls attention to the fact that in these symptoms we have to deal with a degenerative phenomenon such as is often encountered by anyone who has worked with habitual criminals. Moreover, a general dulling of interest does not exist, much more frequently there occurs a definite temporary activity, in the nature of intrigue, disturbances of discipline and a rapid grasp of the situation, as for instance, when a possibility for escape presents itself. Bonhöffer justly thinks that in these manifestations we are not dealing with an excessively strained volitional effort expended upon the attainment of a certain object, but with an abnormal state of consciousness, which may be considered as the mildest grade of auto-somnambulism.

Bonhöffer calls attention to the fact that in the last two cases the development of grandiose ideas in immediate connection with some vexatious experience, or lack of similarity with the so-called typical disease forms, the unusual amnesias which embrace just those unpleasant features and the prison milieu, may very well suggest the suspicion of simulation. He also thinks it possible that both patients have not believed in their senseless grandiose delusions at first, although he offers no further opinion whether there was but a play of phantasy in the production of these ideas or whether they were formulated with a definite purpose, or again, something totally different. In any case, the later conduct of the patients has indicated that delusions, at least temporarily, had become a subjective reality. This is explained through auto-suggestibility.

Bonhöffer characterizes these cases as degenerative psychoses of the form of original paranoia (Originäre Paranoia). Gaupp in his criticism has justly opposed this classification and referred

in this connection to the relation which these cases hold to psychogenic conditions, a much closer relation than they bear to paranoia. In fact these cases also show a series of somatic symptoms such as general hyperalgesia and slight contraction of the visual field, which are more readily reconciled with psychogenic disorders than paranoia.

Karl Wilmanns studied a great number of this group of mental disorders in his review of the prison psychoses presented in 1907 at the 38th Congress of the Southwest German Psychiatrists. His material included all patients admitted to the Heidelberg Clinic between the years 1891–1906. These were all cases admitted from the prisons on account of mental disease or for observation in accordance with Paragraph 81 of the Code. In addition to these there were some cases admitted from free life who, on previous occasions while undergoing imprisonment, developed a psychosis. In all two hundred and twenty-seven cases.

As to the especial disease types appearing among them, senile dementia was entirely absent, paresis rare (6); cerebral lues (1); delirium tremens (10); alcoholic epilepsy (1). Symptomatically these cases differ in no way from the forms observed in free life. Manic-depressive insanity was only diagnosed twice. Wilmanns considered that the rare occurrence of this disease form among prison psychoses indicates that the manic-depressive constitution does not lead to habitual criminality.

The majority of the cases (136, or 49 per cent.) belonged to dementia precox. Wilmanns differentiates here three groups: (1) Tramps who have become asocial chiefly as the result of a slowly progressing psychosis or of an acquired defect following an acute disease. (2) Habitual criminals of whom the majority have been criminal for a long time before the disease had set in, whereas in only a few cases the gradually developing disease process was the cause of the criminality. (3) Occasional criminals, who, in connection with the proceedings, either while awaiting trial or after having been sentenced, have developed

mental disorder. Wilmanns cannot agree fully with the opinion of Siefert that the prison has no causal significance in the development of the true psychoses. He believes that these questions are not to be answered with certainty in the present status of our knowledge concerning this question, but he does think that from the standpoint of the auto-intoxication hypothesis, the assumption of a causal connection between the breaking out of dementia precox and the demonstrable markedly injurious effect of long imprisonment upon metabolism cannot be disregarded without further explanation, because dementia precox appears generally after years of confinement and one can also observe a favorable influence upon the condition of the patient by the removal from prison provided that the psychosis has not already advanced to the stage of dementia. In so far as the clinical picture is concerned in the cases of dementia precox having an acute onset, the effect of the prison milieu is very evident. But particularly does it color the symptomatology of the slowly beginning cases. At the time of the initial change of character, the prison can call forth pictures which are very difficult to distinguish from certain of the functional psychoses (querulants, delusions of innocence, etc.); in such cases after the transfer of the patient to the department for the insane, as in degenerates, a subsidence of the disease symptoms can follow, but sooner or later, however, the process advances. There are eleven (11) cases of epilepsy; these psychoses which originated in prison in part bear a typical epileptic appearance and in part show the character of psychogenic disturbances.

Next in frequency to dementia precox, Wilmanns found among his cases, a prison psychosis which develops on a basis of degeneracy (83–63 per cent.). The psychoses which develop on this basis, he considers as reactions or exacerbations of abnormal predisposition under deleterious influence. The degenerative prison psychoses he divides into acute and chronic. The former develop preponderantly during imprisonment before trial, the latter during prolonged imprisonment.

Among the acute forms various types may be noted; they form no well defined pictures but symptom-complexes which may be associated with one another in numerous ways and are connected by many intermediary stages. The majority of these conditions appear before the thirty-fifth year and end usually with complete insight; rarely after the subsidence of the disorder, the patients believe in the reality of certain abnormal experiences which they then endeavor to explain in accordance with their habitual ideation. The most frequent of these acute forms are the acute delirioid reactions and the Ganser twilight state with its many variations (Racke's hysterical stupor, psychogenic mutism without apparent clouding of consciousness). Furthermore there develop transient psychotic disturbances which apparently arise from hypnagogic hallucinations. Terrifying hallucinations accompanied by anxiety; all sorts of nervous complaints and at times also, mild dreamlike confusions, set in. All these appear during the night. If the imprisonment is not quickly terminated it may lead to severe persistent disturbance. Acute paranoid pictures with phantastic delusions which change the individual's own personality, such as Bonhöffer has described, Wilmanns has likewise met with; he refers their origin to autohypnotic states. Finally he describes acute psychoses with numerous plastic hallucinations, complete retention of consciousness and an anxious irritable affect, forms which strongly remind one of alcoholic paranoia.

These acute states stand in opposition to the chronic degenerative prison psychoses. Under the lasting influence of the monotonous sameness of years of imprisonment, particularly years of solitary confinement, delusional ideas appear and from these chronic psychoses may develop. Wilmanns maintains that according to the individual predisposition, there may develop either phantastic day dreaming or hypochondriacal depressions, both degenerative psychotic conditions just as they are observed in free life. On the other hand the persecutory content of the

delusions is typical of inmates of prisons. In an individual fundamentally suspicious and inclined to an exaggeration of the Ego, or even in those with an abnormally small degree of egotism, there develop, in a way characteristic of the habitual criminal, prejudicial ideas with reference to the officials of law and the prison personnel, which attach themselves to experiences usually insignificant but which, owing to the uniformity of the prison life, are more closely observed and through suspicious broodings exaggerated. In this manner are formed delusions which may remain isolated or develop into a delusional system of the most varied latitude. The characteristic type of these chronic paranoid prison psychoses is the querulant form. After removal to a hospital the further development of the delusions usually stops, and if the patient is freed, the abnormal ideas lose all influence upon the individual's conduct.

Wilmanns discusses thoroughly the clinical position of these degenerative chronic paranoid prison psychoses. They are distinguished from the paranoia and litigious paranoia of Kraepelin only in their prognosis. Yet these forms, according to Wilmanns' opinion, are clinically exactly alike, but those developing in free life "are the results of a more profound degeneracy than those which develop in imprisonment which may be considered as a product of degeneracy plus external removable factors."

All of the chronic forms of degenerative prison psychoses may be combined in the most manifold way with transient or more protracted acute manifestations, such as the numerous hallucinations, anxiety states, etc. Thus forms may develop which in their symptomatic variation remind one of the picture of dementia precox. But the course is in all of these polymorphous forms more or less the same; in the great majority of cases a favorable change in the environment produces a standstill in the course of the disease. Almost all patients in time have insight into the pronounced disease manifestations but cling to the slowly developed ideas of prejudice, particularly when these have

the same trend as the suspicious ideas which are very common among the habitual criminals, concerning the nature of imprisonment and its relation to society in general.

A comparison of Wilmanns' cases with regard to their origin (workhouse, detention prison, penitentiary), shows strongly a preponderance of the degenerative psychoses in the detention prison (62 per cent.) as compared with those from the workhouse (20 per cent.) and those from the penitentiary (18 per cent.). The prison psychoses are unquestionably much more frequent in the penitentiary than these figures would indicate, but the patients in question remain for the most part in the hospitals of the penitentiaries. Dementia precox was diagnosed among the prisoners awaiting trial in only 19 per cent., in those from the workhouse in 61 per cent. and in those in penitentiaries in 68 per cent. The relative rarity of the degenerative psychoses in the workhouse, Wilmanns attributes to the preponderant frequency of high grade imbeciles among the paupers, to the more advanced age of most inmates of the workhouse, and to the great frequency of chronic alcoholics and the rarity of hysterical predisposition in these, and finally to the practice of mass-confinement in the workhouse.

A substantial broadening and deepening of our knowledge of the degenerative prison psychoses was brought about by K. Birnbaum. Birnbaum describes in his monograph in 1908 "Psychosen mit Wahnbildungen und Wahnhafte Einbildungen bei Degenerationen." Although in the description and analysis of these forms, the general clinical interest stands throughout in the foreground, the consideration of the work is justified here, in that all patients of Birnbaum were criminals and with few exceptions had become ill while in prison. The author groups his cases according to the following fundamental scheme: on an already existing psychopathic foundation, there develops from some cause or other—as was mentioned nearly all patients became ill while in prison—a disorder in which the delusional

fabric is essentially restricted to a well coordinated system; this, in contrast to paranoia is not permanent, but recedes sooner or later from varying causes and gives place to the former average norm. The content is of prejudicial ideas, of phantastic, grandiose ideas in inexhaustible variety, delusional memory falsifications, peculiar free phantasy percepts of indifferent content. Hallucinations of all senses appear but mostly are of secondary import as compared with the compass and frequency of the delusional element. The scope and construction of the delusional picture change extraordinarily. Now extensive delusional elements exist, again only a few delusional complexes and finally only isolated ideas. Occasionally the isolated elements form a quite uniform delusional complex, so that relatively pure forms of grandiose and prejudicial deliria arise. Frequently however, are found delusional admixtures of an indifferent content. Often the gross picture is formed by the juxtaposition of altogether different kinds of delusional products: hypochondriacal, grandiose and persecutory ideas may be found associated. Even self-contradictory ideas may occur simultaneously without being corrected. All these delusional formations are very superficial, determine very little the conduct of the patient, are inconstant and easily modified. They also arise in a manner altogether different from that of the true paranoid delusions, that is, in an auto-suggestive manner; they therefore represent in many respects the subjective realization of the patient's wishes, similarly, as in other instances, they repress unpleasant concepts. Disturbances of consciousness appear frequently, especially in the beginning of the psychoses; they not infrequently have the appearance of hysterical disturbance of consciousness (stupor, the Ganser symptom-complex, twilight states). The course of these delusional psychoses shows no regularity. All components of the course are determined essentially by outer influence. Very frequently the psychoses set in without apparent premonition. The delusional system may from the beginning be complete

and may confine itself to the ideas elaborated at the onset, or new ideas may attach themselves, or again, the delusions may alter kaleidoscopically. The cessation of the process occurs gradually as a rule. The former condition of the individual usually is again reached. Not always is complete insight gained; it is not rare that delusional remnants remain but without influence upon the psychic conduct. The prejudicial ideas, especially, remain uncorrected for a time; and particularly do such persons firmly retain their phantastic delusional conceptions who, originally, showed a tendency to the formation of phantastic views concerning things in general. The entire course of these psychoses, as well as the symptomatology, shows multiform variations. Relatively the most frequent are the "simple forms" in which there occurs a simply unfolding of the delusional fabric. Along with this, the combined forms not infrequently occur and indeed, the number of separate combinations is so great that their possibilities can scarcely be exhausted. Still the principal types can be differentiated as recidivous, remittent and intermittent. But all these classifications do not touch the nature, rather only the outward manifestation of the disease process. The combined forms, for example, come into existence through the manifold variations in the disease process, exacerbations and remissions and changing of the delusional ideas. There are also cases, which because of an unusually long duration, appear as chronic; still here too, the susceptibility to external factors, the variability and superficiality of the delusional formation is characteristic. The duration of the psychosis varies from case to case inside of wide limits, amounting to a few days or weeks or months. In the combined types the process may extend, usually with variations, over years, even decades; even then the long continued delusional formation remains capable of retrogression and variability, this being made particularly noticeable by decided occurrences only, *e. g.,* upon the patient's admission to a prison or hospital.

The essential characteristics of the degenerative psychoses, that is, the extraordinary determinability and susceptibility to influence by external factors, the character and the psychological mode of development of the delusions, etc., may be referred in general to the essential characteristics of the degenerative personality: to the exaggerated auto-suggestibility, the great lability of conditions and mental pictures as they may exist at any given moment, to the disproportion between emotive and imaginative activity and to the preponderance of an active phantasy over common sense. Thus these psychoses develop obviously in such individuals upon an abnormal soil. According to Birnbaum they do not constitute a disease process of characteristic kind but rather are episodic psychotic phenomena arising from a degenerative basis and the various phases of combined types are to be regarded as repeated vacillations in the psychic equilibrium.

The beginning of these psychoses occurs quite regularly in the third decade. Birnbaum thinks that this circumstance is referable especially to the entrance of the individual concerned upon life which occurs at this time and in whom as a rule, it at once brings about severe mental upsets. One cannot altogether agree with him in this point. Although this external moment cannot be neglected yet doubtless the real cause of this temporal relation undoubtedly lies still deeper, namely, in the inherent tendency of youth to that variety of psychic disturbances. It has its analogy in the generally recognized preponderant tendency of youth to hysterical psychoses, whose close relationship with the forms which he describes, Birnbaum himself emphasizes. This relationship reveals itself in general in the chief characteristics of hysteria and Birnbaum's degenerative psychoses, in the far reaching similarity in both forms of the basic elements, in the frequent appearance of the same symptoms in both and, finally, in that the same individual not rarely has been attacked at one time by a degenerative psychosis and at another by an hysterical disorder. Thus all attempts to separate these types from one

another are artificial, whereas, all differential difficulties are removed if one includes the hysterical mental disorders among the degenerative psychoses.

As mentioned, most of Birnbaum's cases are prison psychoses. Birnbaum shows in regard to this that it does not concern specific prison influences. The prison milieu can admittedly influence the content of the delusional ideas and be decisive for the complexes which are to develop; analogous disease forms appeared, however, under conditions lacking the prison influence.

While the above cited investigators of degenerative insanity have argued for the inner relationship and impossibility of sharper differentiation between the hysterical, psychogenic and degenerative disorders, Risch endeavors in his work upon the phantastic form of degenerative insanity, to differentiate this sharply from hysteria as a definite disease type, however, without convincing effect. In another work in which he sought by the usual methods to separate the acute prison psychoses (forms with speech and motor inhibition, with transient and slightly prominent visual hallucinations) from the results of psychic traumata as ordinarly observed, he separates hysterical and psychogenic psychoses from one another. He thinks that those psychogenic deliria without hysterical stigmata originating in prison are to be considered more favorable than the "hysterical" deliria as far as the fitness for re-imprisonment is concerned; in the number of the hysterical stigmata present, Risch saw almost a measure of the severity of the disturbances, and also, with regard to the question of responsibility for the act, he establishes differences between hysterical and simple psychogenic disturbances—opinions which are certainly unconvincing and also for which Risch furnishes no proof.

Rüdin published in 1909 the last large work on this subject "On the Clinical Forms of Mental Disturbances in Life Prisoners." He worked with a still little known and highly interesting material and advanced not only our knowledge of the prison

psychoses alone, but also of the psychogenic disturbances in general, especially of those forms, the study of which probably will still furnish us important clinical information.

Rüdin examined forty-seven murderers, originally condemned to death but pardoned to life imprisonment, who had been placed in the insane department at Moabit on account of mental disorder. Because of the severity and the lifelong duration of the imprisonment to which these people were sentenced, psychiatric studies of them are of particular interest. According to the experience of prison physicians there are found among murderers, as Rüdin says, eccentric individuals, psychopaths and degenerates in still greater number than in the average classes of other criminals, and according to Rüdin, Leppmann states that "life prisoners" all at some time or other show mental symptoms, *i. e.,* they develop mental disorder of a greater or less degree.

To the clinical picture of the mental disturbances of the life prisoners, without reference to the clinical forms, belong several characteristic features, fixed delusional conceptions "which can only be explained by the peculiar nature of the dishonorable punishment and life imprisonment."[2] Most frequent is the delusion of innocence; almost as characteristic is the delusion of pardon or discharge. The latter has usually associated with it still other exacting ideas, hallucinations and delusions of wish fulfilling character. "Quite often we have to deal here with repressive manifestations of oppressive, unpleasant ideas or complexes developing psychologically under the stress of a persistent, gnawing affect, a manifestation which we likewise observe not infrequently in healthy individuals, psychopaths and the insane under conditions of lesser stress, an occurrence, which though supported by other ideas in a certain measure forming the

[2] We meet here with a relation which previous writers studying the prison psychoses have found: the distinctive prison milieu casts over the most varied clinical forms of mental disorders which happen to develop in it, a common coloring.

counterpart, takes place through the clinging to the ardently preserved hope of release or pardon, a hope always associated with a strong affect and readily assimilating both false and true ideas in its substantiation." Finally insane life prisoners without regard to the disease type, strikingly often appear to have aged early.

In regard to the isolated disease forms, Rüdin found that as with other prisoners, with life prisoners also, dementia precox was the most frequent (21 of 47 cases), that manic-depressive insanity, which is generally very rare in prisoners, was altogether absent. Four patients were epileptics, nine had psychogenic psychoses (among which two were hysterical and four developed on the basis of "epileptoid degeneracy"); one case was a psychosis associated with progressive deafness and imbecility; four patients suffered with litigious paranoia; two from paranoia (Verrücktheit); six from "presenile pardon delirium (Begnadigungswahn) of life prisoners."

Rüdin found in his dementia precox cases "that the delusions of innocence and pardon so characteristic of all life prisoners occurred in some in pronounced form but once, in others they disappeared and returned, while in still others they permanently dominated the disease picture, while the hebephrenic characteristics were not in the least obscured"; occasionally also a delusional interpretation of the criminal act as a requisite for the fulfilling of a religious mission was found. Thus typical disease pictures generally bore symptomatically in great measure the stamp of the peculiar fate and the peculiar surroundings of life prisoners. One of the patients, a wife murderer, was especially interesting. He was already recognized to be mentally diseased at forty, seven years before entrance upon the life sentence. At fifty-one he showed a pronounced Delbrück symptom-complex. Gradually the mental disintegration progressed to a condition of confusion and advanced dementia. At the time of the observation he was seventy-six and at least thirty-six years after the

beginning of the psychosis palpable signs of senile dementia and senile confusion were recognizable. Rüdin considers here the clinical similarity of the Delbrück symptom-complex to catatonia, with termination in catatonic dementia and confusion and later the development of senile dementia, as evident.

The four cases of epileptic psychoses differ in general but little from types of this disease seen in free life. Among some of these, as is often enough the case in free life, psychogenic features are mingled and for the rest, they bear the stamp of the peculiar fate of the patient.

The remainder, *i. e.,* twenty-two of forty-seven cases are clearly psychogenic in origin or are types of psychoses showing a marked psychogenic coloring. Among the clearly psychogenic forms, Rüdin describes first, as unusual types of cases, those whose clinical classification he cannot determine with certainty. A certain affect duling, marked development of hallucinations, slight susceptibility of symptoms to change of milieu reminds one of dementia precox; still the principal symptoms of this disease are not present in significant degree; the disease picture permits a specific personal predisposition to be presupposed and bears the stamp of the sad surrounding and the harsh fate. Thus it seems to Rüdin most natural to assume that the three cases are "psychogenic results which hopeless imprisonment has occasioned." We are dealing here with truly characteristic pictures which essentially differ from the forms which Birnbaum has described above all by the immutability, fixity and slight susceptibility to outer influence of the symptoms. Particularly the third of the three patients is noteworthy. A man of limited ability, accused of murder, while awaiting trial suffered from an attack of hallucinatory stupor without demonstrable clouding of consciousness. He made changing, contradictory statements in regard to his crime and attempted suicide after sentence. Later his condition was variable, now clear, now lost in dreams, indifferent, once mute for an entire year. With the cessation of

this mutism the patient showed an amnesia for his sentence and crime and "by-speaking" (Vorbeireden); later he developed the delusion that the state attorneys, judges and doctors conspired against him; he showed a good memory for all factors favorable to him, amnesia on the contrary for the crime and everything oppressive to him, along with an otherwise good memory. Rüdin explains the case, doubtless correctly, in the following manner: the patient carries on a stubborn, continuous, conscious and unconscious struggle against the effects which the murder has upon his conscience and fate. At first he is still uncertain but always succumbs again and again to those abnormal expressions of mental and physical torpidity which so frequently develop in connection with "powerful psychogenic stimuli," and finally finds his mental equilibrium through incessant brooding and unconscious repression of all factors which oppress his conscience, thus he succeeds "with full conviction to replace actual occurrences with a tissue of delusional ideas, in which he himself is no longer a justly punished criminal but an innocently persecuted individual." Perhaps this person would never have come into contact with the psychiatrist, had he not received the severe punishment.

Along with these three cases Rüdin considers two hysterical psychoses, four cases of "psychoses on the basis of epileptoid degeneracy" as true psychogenic psychoses. Under the latter title Rüdin describes psychoses which in their course clearly resemble epilepsy but of which the origin either entirely, or preponderantly, is psychogenic. Hysterical stigmata and a decided hysterical character are absent, also, isolated symptoms are in much slighter degree susceptible to influence than in the hysterical psychoses. On the other hand, the characteristics of the classical epileptic, convulsive attacks, typical deterioration with dullness, circumstantiality, etc., are absent. On the contrary, some symptoms remind one strongly of epilepsy, such as a certain periodicity and brutality; the fact that alcoholism and epilepsy are frequently found in close association in such patients shows its close relation to epilepsy.

Also, the case of psychosis associated with progressive deafness and imbecility Rüdin places with the psychogenic forms, but is of the opinion that we can first gain a closer knowledge of such psychoses associated with deafness after collecting a larger number of these cases.

Rüdin looks upon the litigious paranoia in agreement with other authors as "a definite paranoid form of reaction of a definite psychopathic predisposition to definite external vicissitudes of life, perhaps favored, brought out or made possible, by definite dispositions associated with age, sometimes by crises of a physical nature, sometimes by a reduction of the general constitutional resistance of the organism through debilitating diseases and insomnia, with more or less pronounced restitution under favorable environmental conditions." The four patients of Rüdin who belonged to the form of chronic litigious paranoia with delirium of innocence all show originally the characteristic querulant predisposition. Rüdin is of the opinion that the physician, in these cases which according to their previous history are susceptible, must recommend their discharge in the earlier stages of the disease, in order to obtain their cure. In life prisoners who develop litigious paranoia, the possibility of restitution is particularly limited, for the extremely severe trauma and the otherwise unfavorable situation of the prisoner makes a return to normal conditions very difficult.

After a description of two chronically insane patients, Rüdin finally describes the presenile delirium of prejudice (Beeinträchtigungswahn) of life prisoners. This peculiar disease picture described by him for the first time develops in prematurely aged prisoners, who up to that time had behaved themselves well in prison life. Quite suddenly the delusional conviction of being pardoned appears. With it are associated vivid hallucinations, particularly auditory hallucinations of which the content is encouraging, but there may also be a disturbing and frightful content. The delusion is unshakable, is based upon a naïve, childlike rea-

soning, but remains well within the limits of the possible, is not confused and bizarre; the systematization does not reach very far. Orientation and consciousness remain intact, the behavior is orderly and natural. And although they plead with great emotivity their right to freedom, and also, as a consequence subsequently they refuse to work, they show usually, a quiet, approachable and indulgently gentle attitude. They are not irritated by arguments, although these may be contrary to their delusional beliefs. Rüdin considers this disease as psychogenic, as a result of the permanent trauma together with the severe fate of life prisoners, without, however, denying the fact that the premature senescence of the brain, an essential factor predisposing to disease, is general with these prisoners. In all cases the disease first appeared in advanced age, between the forty-fifth and sixty-third years; all patients seem to be prematurely changed physically, and some of them show a certain, although not very pronounced weakness of memory, perceptive disturbances, a pitiable, childlike unwieldiness of thinking. This predisposing influence of premature senility Rüdin does not consider more important than the degenerative predisposition of a juvenile degenerate who develops a prison complex; neither would have become ill had they not come into contact with the harmfulness connected with the prison. This form of disorder must be differentiated from the senile persecutory delirium although a certain relation exists between the two; the conduct of the patients suffering from "the presenile delirium of pardon" is more orderly, their attitude is more accessible and more pliant than we observe in patients with senile persecutory delirium; in addition to this the cases of Rüdin appeared in early age, developing comparatively rapidly, and further, the delusional ideas are fixed, not confused and disconnected as in senile persecutory delirium.

In a statistical work, the last appearing on our subject, Kurt Wilmanns finds in two hundred and twenty cases from the Bonn Clinic, that two distinct, separate symptom-complexes appear,

which he believes may be considered prison psychoses, a stuporous type representative of mass-imprisonment and a paranoid type, as the form of solitary confinement. These psychoses develop more readily in degenerates and in the mentally disordered than in the mentally normal. The work is wholly statistical, and all clinical comments are lacking. Therefore, one is unable to consider, and particularly to judge, these important results as the author separates both types, as he also has attempted to do in dementia precox, from the symptom-complex of the fundamental disease altogether without consideration of the fact that the differentiation of stuporous and paranoid forms, where both are so intimately mingled must, in many cases, be purely arbitrary.

CONCLUSIONS

The study of the literature on the prison psychoses from Delbrück to the present time, on account of the contradictory results of the numerous works is often discouraging and fatiguing. Followers of the various schools have tried to solve the question and the psychiatric conceptions with which they approach the work are so many and contradictory, that it is difficult to consider the result from any one standpoint. Almost all authors form their opinions from the study of the disease material to which they have access, without comparing them critically with the opinions of their predecessors. The few who do this, scarcely question that the wide disagreement between their own and earlier studies is to be referred to a probable dissimilarity in the material studied. Thus the most variable material has served the students of this subject as the foundation of conclusions to which they would assign a general validity. Thus they sought to solve the question of the prison psychoses in prisoners, who during short imprisonment or after long confinement, develop a mental disorder in penitentiaries, in mentally diseased reformatory inmates, in those showing acute mental disorders while awaiting trial, in the chronic insane in the asylums. As the authors must come to contradictory conclusions on the ground of such varied material and as the present ideas concerning the prison psychoses have developed from this chaos of contradictory opinions, a few comments should be made here concerning them.

We have separated our review into three parts. The first embraces the works of the old school, the second considers the question of prison psychoses from the standpoint of Kraepelin's conception of dementia precox, and the third from the standpoint of the Magnan-Mobius ideas on degeneracy.

The first period is especially characterized by the works of

Delbrück, Gutsch, Sommer and Kirn. The cases which Delbrück sought to describe under his "criminal insanity" were the chronic dementing psychoses. This finds its explanation in the character of the material which served as the basis for his observations. The fact that the house of correction at Halle served as the outlet for other prison institutions which preferred to transfer their insane or otherwise undesirable inmates there, as well as the fact that this institution was meant exclusively for the worst criminals sentenced to long terms, among whom the chronic psychoses in the course of time naturally often occur, permits of the conclusion that the progressive incurable disease processes must have gathered there. It is therefore not surprising that the physician who had for years been in this prison service should have been especially attracted by the development under his own eyes of these disturbances with their manifold and variable pictures. The natural result was that Delbrück considered the relatively rare acute psychoses either as episodes in the slowly developing processes, or, in accordance with the then greatly overestimated frequency of the occurrence of simulation of mental disease, explained them as simulation. The description which Delbrück gave us of these progressive psychoses, contains, however, many pertinent observations. But on the other hand, his theory misled him to an inaccurate psychologically unexplainable and unanalyzable description of the development of the disease, in that he believed that in the criminal by passion, it is the remorse for the deed, and in the habitual offender against property, it is the result of the derangement of his bodily and mental health through his criminal career which causes him to fall prey to mental disturbances.

While Delbrück has given us the first description of dementia precox developing in prison, the interest of Gutsch has centered in altogether different cases. The prison at Bruchsal where solitary confinement is the rule, does not serve as the outlet for other prisons and the acute mental disturbances play a larger rôle among the numerous newcomers than in Halle. The prognosis of the

mental disturbances in Bruchsal was naturally more favorable, a large number of patients recovered while still in prison and remained well in freedom, as the catamnestic researches of Gutsch showed. Thus Gutsch fell into the opposite error. While Delbrück explained the relatively small number of acute symptoms among his cases as the forerunners of his "criminal insanity," Gutsch from his observation of the frequency of recovery from the melancholia of solitary confinement, underestimated the number of the prognostically unfavorable forms.

On looking over the material of Delbrück, it is evident that it decidedly opposes the independency of the melancholia of Gutsch which is considered but a transient developmental stage of his "criminal insanity," but not as characteristic of solitary confinement. This opinion was also supported by the psychiatrists Köhler and Sommer, and later by Naecke. It is conceivable without further comment that their material was composed almost exclusively of chronic mental disorders. Their studies could therefore only form a contribution to the knowledge of the forms of dementia precox occurring in prison; an explanation of the prison psychoses in their entirety from the limited character of the material examined is not to be expected. That their descriptions also in part deviate greatly from actuality, must be referred to their attempt to consider dementing processes psychologically, as is particularly evident in the work of Sommer. We will always owe to these researches the knowledge that this "criminal insanity" described by Delbrück is only a characteristic disease of prison in so far that the imprisonment determines its peculiar form and content, but that a casual connection between prison and psychosis does not exist. Sander and Richter present the same opinion in their well known monographs on the relation of mental disturbances to crime.

The work of Kirn shows a significant advancement over that which preceded it. His observations are based upon the inmates of the county jail at Freiberg, who during their short imprison-

ment became ill, therefore, a material in which along with the chronic, many acute psychoses were represented. A fundamental psychiatric training and an active interest in our questions permitted Kirn during many years' observations to segregate from the recognized forms of psychoses those which occur in imprisonment. As we previously have shown, Kirn described two progressive delusional forms which lead to deterioration. The one develops gradually on the basis of moral imbecility, the other originates acutely on untainted soil. The first is identified by Kirn with the paranoia of the criminal (Verbrecherwahnsinn) of Delbrück and the prison paranoia (Gefangenwahnsinn) of Sommer; he himself describes it under the old name of paranoia of the criminal (Verbrecherwahnsinn), in contrast to the second form which he calls the prison paranoia. Besides these two chronic types, Kirn separates two acute specific prison psychoses: the acute hallucinatory melancholia, and the acute hallucinatory paranoia related to it through various transitions. The acute hallucinatory melancholia was to Kirn a symptom-complex sharply differentiated from melancholia simplex. This frequently occurs in free life but is rare in prison; this resembles the simple depression of the manic-depressive psychosis and thus the observations of Kirn correspond to the experiences of recent authors in regard to the rarity of the occurrence of manic-depressive insanity in prison. The acute hallucinatory melancholia on the contrary is a rare disease in freedom; it is like the acute hallucinatory paranoia, a characteristic psychosis of solitary confinement. Both of these disorders contain the nucleus of those acute depressions which Gutsch has described as the melancholia of solitary confinement. Kirn was able to differentiate them sharply from the extremely similar disturbances even if he could not differentiate the acute hallucinatory paranoia from the symptom-complexes which introduced the prognostically unfavorable chronic prison psychoses. Kirn was consequently the first who sought to differentiate sharply between progressively dementing processes

and acute curable psychoses. That he succeeded in making this differentiation in most cases is learned from the catamnestic observations of his cases made by Homburger. In the description of the paranoia of the criminal (Verbrecherwahnsinn) we again recognize those forms of dementia precox which develop slowly in psychopathic habitual criminals, and in the chronic prison psychoses, those which develop acutely on a not demonstrably defective basis. The description, however, which Kirn has given of the acute hallucinatory melancholia and of hallucinatory paranoia leaves no doubt that fundamentally these rest upon degenerative prison psychoses. Although Kirn came much nearer to the present opinion in regard to the prison psychoses than any of his predecessors, his opinions did not become current and were actively opposed by later workers. The independence of both of the acute solitary confinement psychoses described by him has been attacked. Kühn maintained that he had observed the same symptom-complexes in free people and saw in them merely an episode in a chronic disease. This standpoint is understood if we mention that his observations were made on fundamentally mentally diseased reform school inmates, and that as the later observations of Wilmanns showed, the degenerative psychoses are much less frequent among reform school inmates than dementia precox.

Naecke was like Kühn unable to agree with the teachings of Kirn, inasmuch as he brought forth the same arguments against him on the ground of his investigations conducted among the inmates of a county insane asylum.

The importance of the study of Reich of the acute psychic disturbances during imprisonment, appearing in 1871, remained without influence upon all the previously mentioned works. In th
he describes a number of persons who as a result of the int .t.
impression upon the emotions, caused by a short sentence par-
imprisonment while awaiting trial, developed a very acute more
disturbance from which they recovered after a few hou regard

the latest a few weeks. Characteristic for this psychosis[1] was a kind of psychic inhibition, an increasing clouding of consciousness, the development of the psychic activity into an hallucinatory dream-life and the amnesia after the disappearance of the disorder. These signs, as well as the tendency of the patient to convulsive seizures, led Reich to place these psychoses developing in prisoners awaiting trial, in that large group of psychically abnormal processes which develop from affects and in affect-like conditions. In spite of the, for that time, very excellent casuistic material, the observations of Reich fell into oblivion and it is also a decided defect in Kirn's work that he does not give enough consideration in his descriptions to the clouding of consciousness and the amnesias.

The work of Reich remained at first the only one which took account of the psychoses in prisoners awaiting trial. It was not until 1888 that Moeli called attention to that peculiar symptom-complex, which up to that time had been frequently described in the literature on simulation. It, however, required the work of Ganser, whose name is since then closely connected with this condition, in order to make it known to a wider circle. Ganser intensified the sketched picture of Moeli, he pointed out the dream-like clouding of consciousness and the greater or lesser loss of memory for occurrences during this confusion, and the hysterical stigmata, and considers the disturbance as a hysterical twilight state. In spite of the marked difference, the close relation existing between the Ganser twilight state and the acute mental disturbance of Reich is apparent.

The work of Ganser called forth a number of publications upon the same disease picture, among which that of Raecke's is

[1] That the acute psychoses were known to the narrower Illenau school ong before the appearance of Reich's paper is shown by the comments of ler upon the opinions of Gutsch on the melancholia of solitary con- cent, whom he advises to give more careful attention to "the condi- pris consciousness during and after these attacks and to the coexisting diffe and psychical states."

to be particularly mentioned. Besides the important works on the Ganser twilight state, we owe to him the description of the hysterical stupor in prisoners, a disease picture which is closely related to and through transitions associated with it, which also had its forerunners in certain descriptions of Reich. It is to Raecke's credit to have shown the susceptibility to outside influences and ephemeral character of these disease symptoms and to have pointed out the characteristics in the differential diagnosis from catatonia. Thus to the critical and unprejudiced judge of the first period of the literature on these mental disturbances, which either because of their mode of genesis or their symptomatology stood in close relation to prison, became known: firstly, the chronic psychoses, which develop either on the basis of a criminal predisposition (Verbrecherwahnsinn, Kirn) or upon a not demonstrably abnormal predisposition (Gefangnisswahnsinn, Kirn), further, acute psychoses with a favorable prognosis,—the acute mental disturbances in prison (Reich), the *melancholia hallucinatoria acuta* (Kirn), the *paranoia hallucinatoria acuta* (Kirn), the Moeli-Ganser symptom-complex, the Raecke stupor, and finally, the litigious paranoia (Querulantenwahnsinn), which according to Kirn and Kraepelin, also owes its origin to the prison influence in many cases.

The consideration of the prison psychoses from the standpoint of Kraepelin's teachings of dementia precox, characterizes the second period. Kraepelin's opinions in regard to the prison psychoses had their forerunners firstly in Delbrück; later Sommer, Kühn, and Naecke had expressly shown that those independent disease pictures described by Gutsch and Kirn were only episodes in a disease with a symptomatology phenomenally protean in its manifestations. Nevertheless the investigation of the prison psychoses from new standpoints showed a decided advancement. Rüdin has the credit of being the first to have shown with particular exactness that all psychoses occurring in prison (to be more correct, almost all, as our knowledge up to the present in regard

to paresis is uncertain) under the influence of the particular milieu, receive a characteristic appearance and because of the development of this "prison complex" can show a certain outward resemblance. Wilmanns showed by a number of thorough life histories of insane tramps what influence upon the life of these patients is exerted particularly by the slowly developing forms of dementia precox, and that a part of the diseases previously characterized as paranoia of the criminal (Verbrecherwahnsinn) and the paranoia of the imprisoned (Gefangenenwahnsinn) were only exacerbations of already existing disease processes. But without mistaking the advancement which was added to the knowledge of the prison psychoses during this period, on the other hand, we cannot deny that the wide limits of dementia precox as well as the overestimation of the diagnostic significance of the so-called catatonic symptom must have brought about an undoubted superficiality of observation and hastiness in judgment of the cases. The result of this was that the value of the works of Reich, Kirn, Ganser and others were underestimated or overlooked.

The two mentioned works represent the second period. The contributions of Skliar, Mönkemöller and Hoffmann arrange themselves only temporarily in this period; they belong so far as their content is concerned more in the first period.

Rüdin in his first work covering the Heidelberg material contested the existence of a specific prison psychosis. On the ground of his later observation at Moabit, he believes that he found in several cases of acute hallucinatory persecutory delirium (Verfolgungswahn) without further systematization or correction, a definite independent prison psychosis. Also other investigators, who, following in principle the opinions of Kraepelin, found that the prison could produce symptom-complexes which cannot be classified under the types of the Kraepelin school. They again became conscious of transient disorders which develop in hysterical persons during imprisonment and had to acknowledge the accuracy of earlier observations, especially the descriptions of Ganser and Raecke.

It remained for the third period finally to bring greater clearness to the subject of the prison psychoses. It is characterized by the fruitful Magnan-Mobius ideas on degeneracy in their application to the clinical evaluation of this group of psychoses. Quite simultaneously and more or less independently of one another, the adherents of the various schools came to the opinion expressed by Reich when he brought the acute mental disturbances in prison into connection with the psychoses which develop in abnormal persons on the basis of affective disturbances. Through the support of the teachings on degeneracy it was established that the majority of the prison psychoses are not of pure endogenous origin but rather reach their development from the reciprocal effect of the psychically diseased constitution and the manifold physical and psychic traumata of prison. While the earlier observers only made mental deterioration the object of their studies and considered the original personality of the patients in all cases from the standpoint of their criminal life and their criminal act (criminal by passion or habitual criminals), there now appeared in the foreground the relation between the original predisposition and the psychoses and the previously neglected study of the abnormal predispositions was given particular consideration.

Siefert was the first to publish his observations. He placed the acute psychoses which arose and grew from inner causes opposite the degenerative which were the products of predisposition and outside influence. The sharp separation of disease groups which were never definitely differentiated by previous contributors to the subject, i. e., juvenile deteriorating processes, which engraft themselves as a foreign element upon the personality and which themselves often outwardly resemble degenerative psychoses, but which represent merely abnormal reactions and intensifications of abnormal predispositions, necessarily had a stimulating and clarifying influence. In several points, the differentially diagnostic symptoms of these groups of psychoses are certainly laid down too dogmatically and their significance overestimated. In con-

trast with earlier investigators in this field who unanimously had assumed that the demential processes were instituted by the imprisonment and that their development could be checked by the interruption of the imprisonment at the proper time, Siefert stated with emphasis that they were of purely endogenous origin and were uninfluenced by a change of milieu. While Rüdin had shown that the prison influence gave a characteristic coloring to each disease occurring in prison, Siefert thought that the symptomatology of the true psychoses could be influenced but little by the surroundings. The result of these preconceived ideas, as well as the overestimation of the differentially diagnostic significance of certain symptoms which are quite characteristic of the psychoses of degeneracy in general, was a more frequent failure in recognizing the demential processes. Also, in his general conception that habitual criminality rests upon a markedly degenerative predisposition and that the degenerative prison psychosis to a certain extent represents a reaction of the disease potentiality and permits of a social prognosis, Siefert doubtless overshot the mark as is indicated by the catamnestic researches of Homburger. However, these exaggerations do not invalidate the great worth of his work. Siefert had already mentioned the transitional character of the numerous forms of the degenerative mental disorders and limited himself in the arrangement of his material to setting up solely well recognized groups.

Bonhöffer sought to isolate delimited types from the great variety of degenerative psychoses; the acute paranoia as a simple paranoid reaction on the basis of debility, the chronic paranoia as a pathological intensification of an existing predisposition, the original paranoia owing its origin to the lability of the ego.

Wilmanns differentiated the acute reactions on the basis of degeneracy and those gradually developing states on abnormal predispositions and sought to prove the existence of both of these groups by describing isolated types.

These contributions were made more profound by the most

excellent researches of Birnbaum. These limit themselves essentially to a group of degenerative psychoses which are closely related to those described by Bonhöffer as original paranoia, a type of abnormal personality which is characterized by an extreme autosuggestibility, by the lability of the momentarily existing psychotic states, by the disproportionate preponderance of active phantasy over sober thought, and in which there develops in prison extremely variable, contradictory, superficial and easily influenced psychotic symptoms of most varied kinds.

Rüdin showed in his instructive case histories that the common ending influenced the symptomatology of dementia precox and the degnerative psychoses of life prisoners in a similar manner. Aside therefrom his descriptions form a noteworthy supplement to the observations of Birnbaum. We see that these patients who, in the finality, fixity, and slight susceptibility to influence of the disease symptoms, stand in direct contrast to the cases of Birnbaum, and who appear to form a part of the decidedly uncommon chronic psychogenic disease forms, throw an interesting light upon the position of certain psychoses of free life.

Thus the third period in the study of the prison psychoses means a decided advancement, not only in the knowledge of this particular group of psychoses, but further, they afford a new viewpoint for the answer to the questions of general psychopathology and the consideration of certain diseases of free life. The long contention concerning the question of a specific prison psychosis was determined in so far that the juvenile demential processes which happen to develop in prison obtain only a characteristic coloring from the prison milieu and that in suitably organized personalities acute and chronic psychoses can develop, which may be placed alongside of those developing in these persons in free life under the influence of strongly affective experiences. The peculiar symptomatology of these psychoses justifies us in considering them as especial types, well differentiated from those developing in free life. From this viewpoint, we may bring them

together as especial prison psychoses, just as we describe under the collective term "traumatic neuroses" those very numerous individual reactions and developments which we observe in free life as the immediate and mediate results of accidents. However, as among these it is possible to establish various types according to the ground on which the disease developed and according to whether the shock accompanying the accident, the inefficient medical treatment, or the suit for damages, were especially potent in producing the disorder, just so would a deeper investigation of the prison psychoses place us in a position both to settle upon the characteristic types and their relations to the original personality of the patient and also to have a more fundamental conception of their symptomatology. A more exact knowledge of these psychoses would also permit gradually a greater accuracy in the limitation of similar symptom-complexes which we frequently see as introductory phases of the juvenile demential processes. The final solution of this problem will remain for those who can intimately follow the slow genesis and gradual development of these disturbances. The prison physicians are therefore called upon to reinvestigate this much discussed question and to solve as far as they are able the question of the effect of various kinds of imprisonment upon mental health or whether long imprisonment can produce diseases leading to deterioration. Their problem must finally also be to broaden our knowledge of the mentally disordered criminals by systematic examinations of mentally normal criminals and to place under psychiatric observation the various categories of life term and shorter imprisonments.

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